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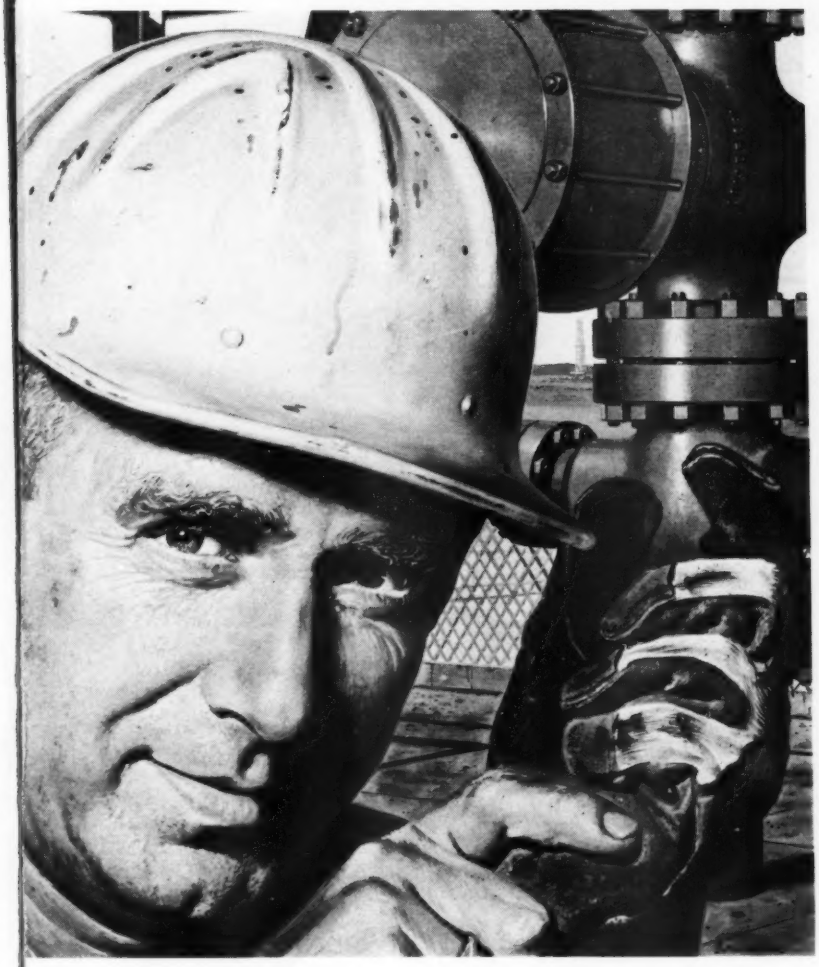
The Marine Oil OPERATIONS Journal

FIRST! QUINTUPLE COMPLETION
See Pages 11-16



CAMERON TYPE "F" GATE VALVES GIVE MORE SERVICE FOR LESS MONEY

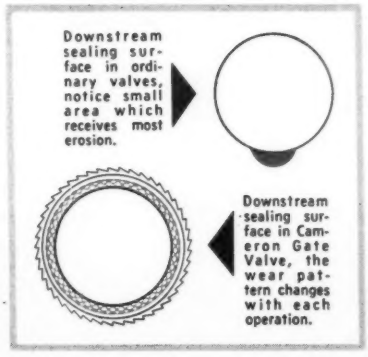
THIS IS THE REASON –
Cameron Type "F" Gate Valves for API service have reduced operating cycle costs to the lowest of any valve in similar service.

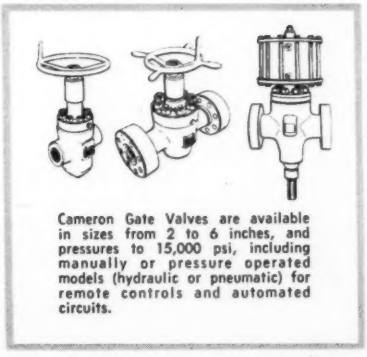
HERE'S HOW –
The rotating seat design found only in Cameron Type "F" Gate Valves exposes a new sealing pattern each time the valve is operated. Old design concepts are based on wedge fits to increase gate or plug contact pressure, viscous lubricants to bridge abrasions and reduce inherent friction, soft seals, or combinations of these conventional solutions to a tough problem. After extended tests and evaluation of every contemporary valve for API service, a summary revealed that all valves had one common characteristic. The down stream seat showed the most wear – maximum erosion always occurred in the same point – where pressure was first released in opening or where pressure was finally pinched off in closing.

Then a new idea was conceived. Rotating, the seat a fraction of a turn each time the valve was opened and closed would present a new surface at the critical point of greatest wear. This principle is the central feature of the Cameron Type "F" Gate Valve.

WHAT ABOUT COST?
All marketable valves when purchased must hold and release pressure. But purchase price does not represent total cost to use a valve. To purchase price must be added operating cost (continuous lubrication, frequent and difficult repair, slow operation) for the useable life of the valve. Divide this total by the number of times the valve is operated and you have a true picture of the original purchase. Actually you are buying operating cycles.

If you want the most operating cycles without maintenance – the lowest cost per cycle during the entire life of the valve no matter how tough the service, try Cameron Type "F" Gate Valves.


Downstream sealing surface in ordinary valves, notice small area which receives most erosion.
Downstream sealing surface in Cameron Gate Valve, the wear pattern changes with each operation.



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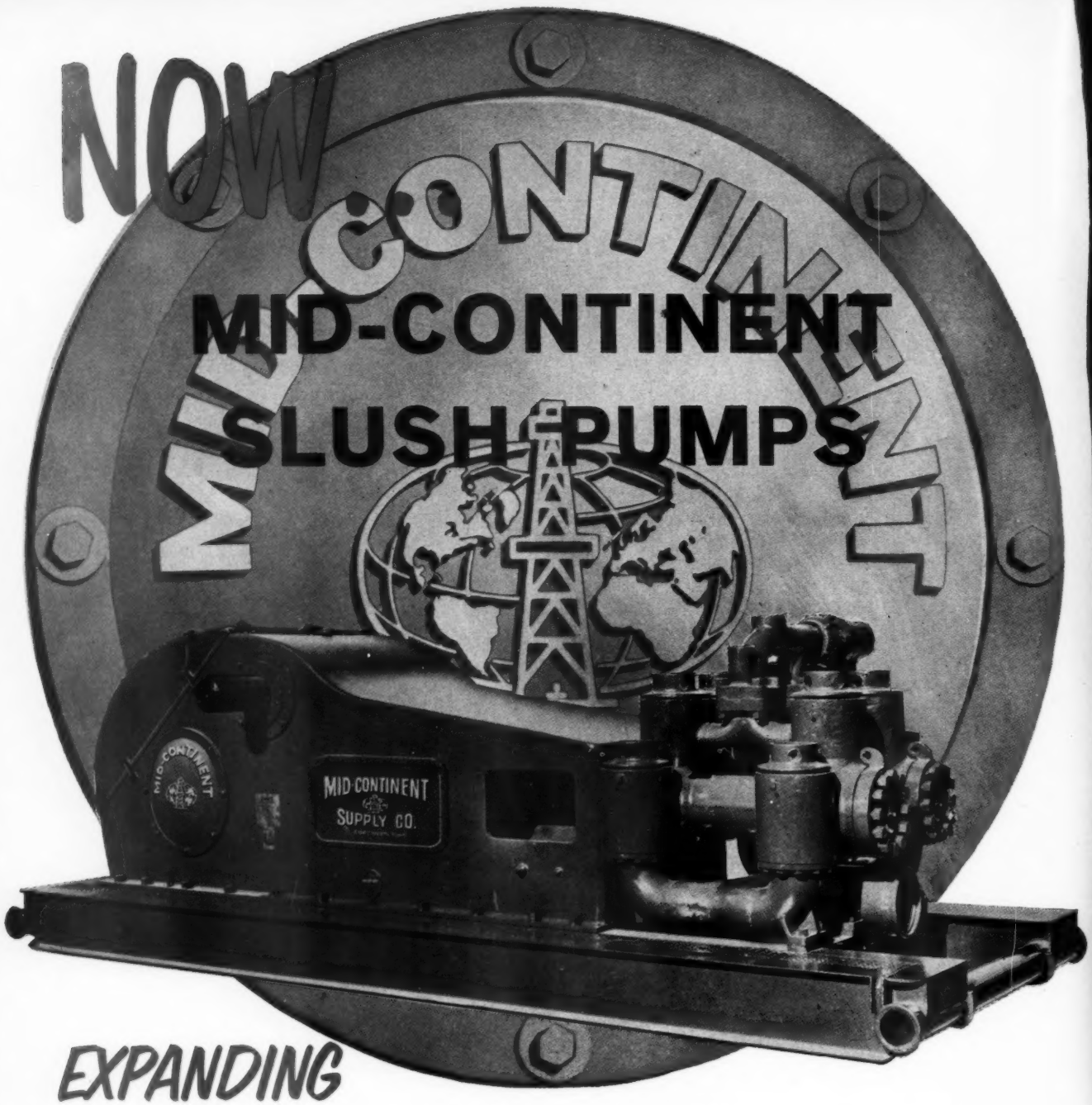

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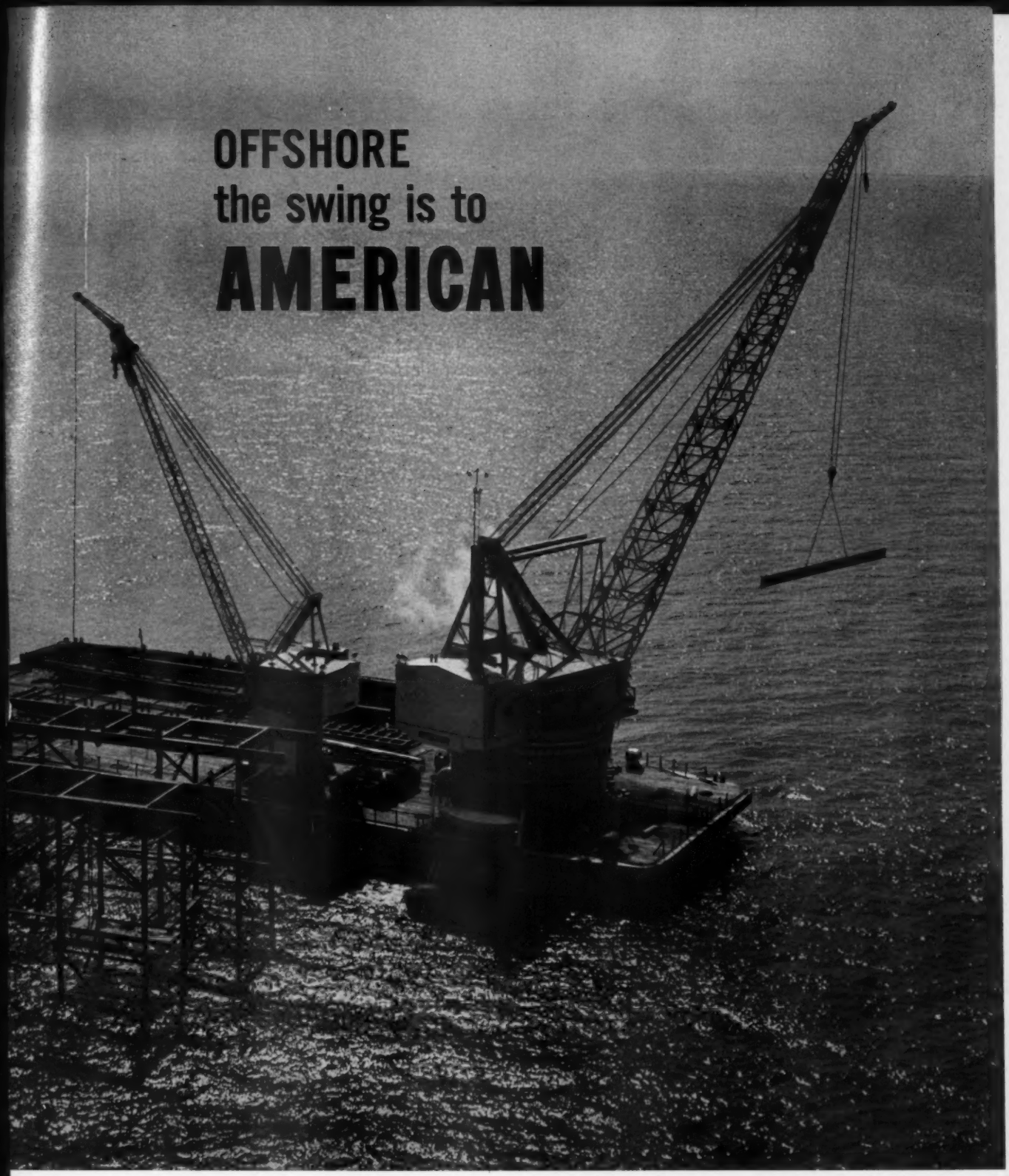

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JACK BEECH
Staff Photographer
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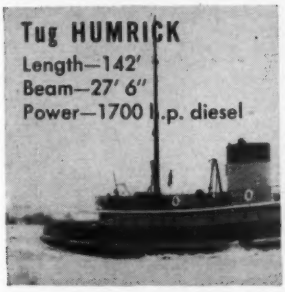

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Beam—27' 6"
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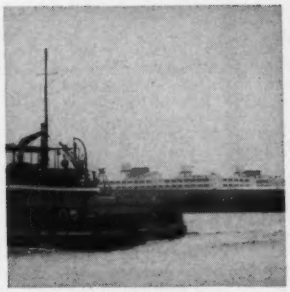

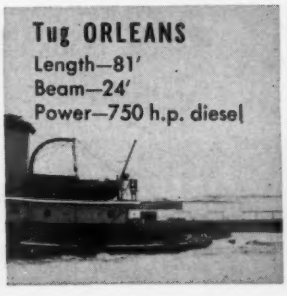

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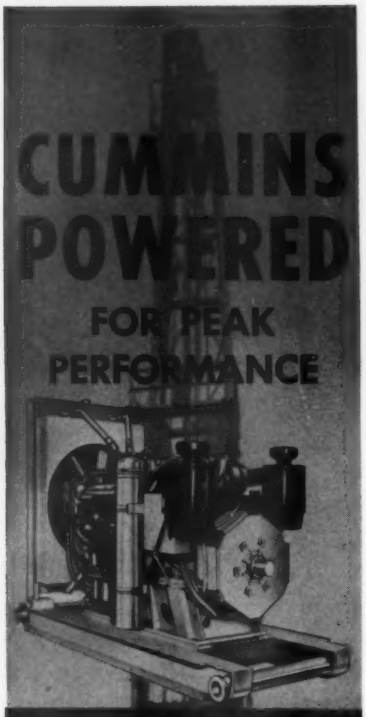

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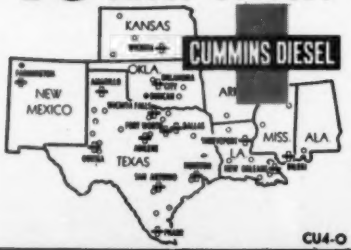

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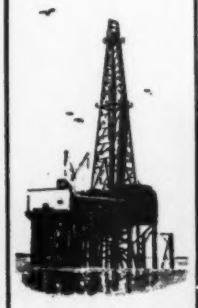

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Now, if you use these steel tanks, you lose about 100 barrels of mud every time you jet down one foot. Since it is common practice with muds in the 12-pound range, to jet at least one foot per day, that means you jet away something like $400.00 worth of barite, oil and chemicals. With heavier muds, there will probably be less jetting. However, the greater amount of barite and chemicals per barrel means an even greater loss by jetting. You can avoid that loss if you use the CLAYJECTOR to process your mud — rejecting unwanted clays and retaining expensive barite.

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To summarize, you save over $300 for every 100 barrels of mud you would have jetted — if you use the CLAYJECTOR instead of jetting. *Even when you deduct the cost of the CLAYJECTOR, you still can save well over $200 per day.*

This example may not apply precisely to your conditions, but your nearby Swaco sales engineer is ready to help you estimate your probable saving. Call him for more information.

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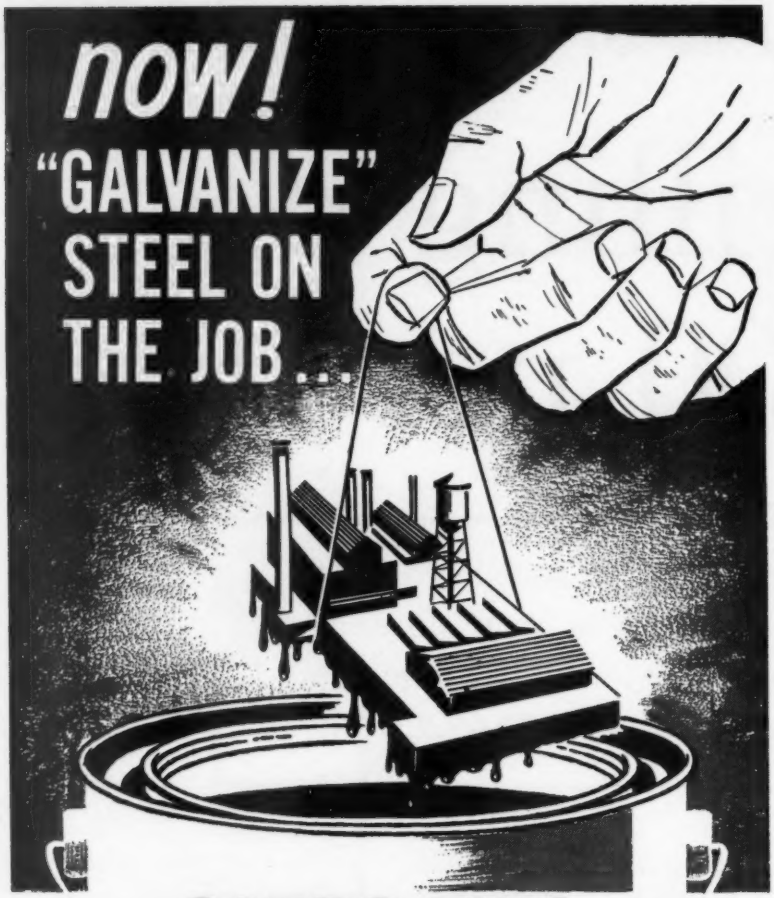

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With the Publisher

As a towheaded young'un out in West Texas and New Mexico, I was trying to walk bowlegged at the age of seven—like my Uncle Em, who was a cowboy. I also had the notion I could ride anything with four legs and hair, as the old western expression goes, providing my older brothers could get a saddle or surcingle on it.

As a result, I've been pitched into fences, feed troughs and water troughs by a whole passel of yearling bulls, heifers, wild burros and green broncs—and used my freckled nose to root up quite a few cow-chips while they were still reasonably fresh.

But I reckon the wildest ride I ever made was on a windmill fan.

A couple of neighbor kids were the cause of it. To show off, I bragged that I could ride the fan of this 100-ft. windmill. Might have made it, too, if I hadn't got my hand caught in a cogwheel while crawling out on the fan, and let it chop off a finger.

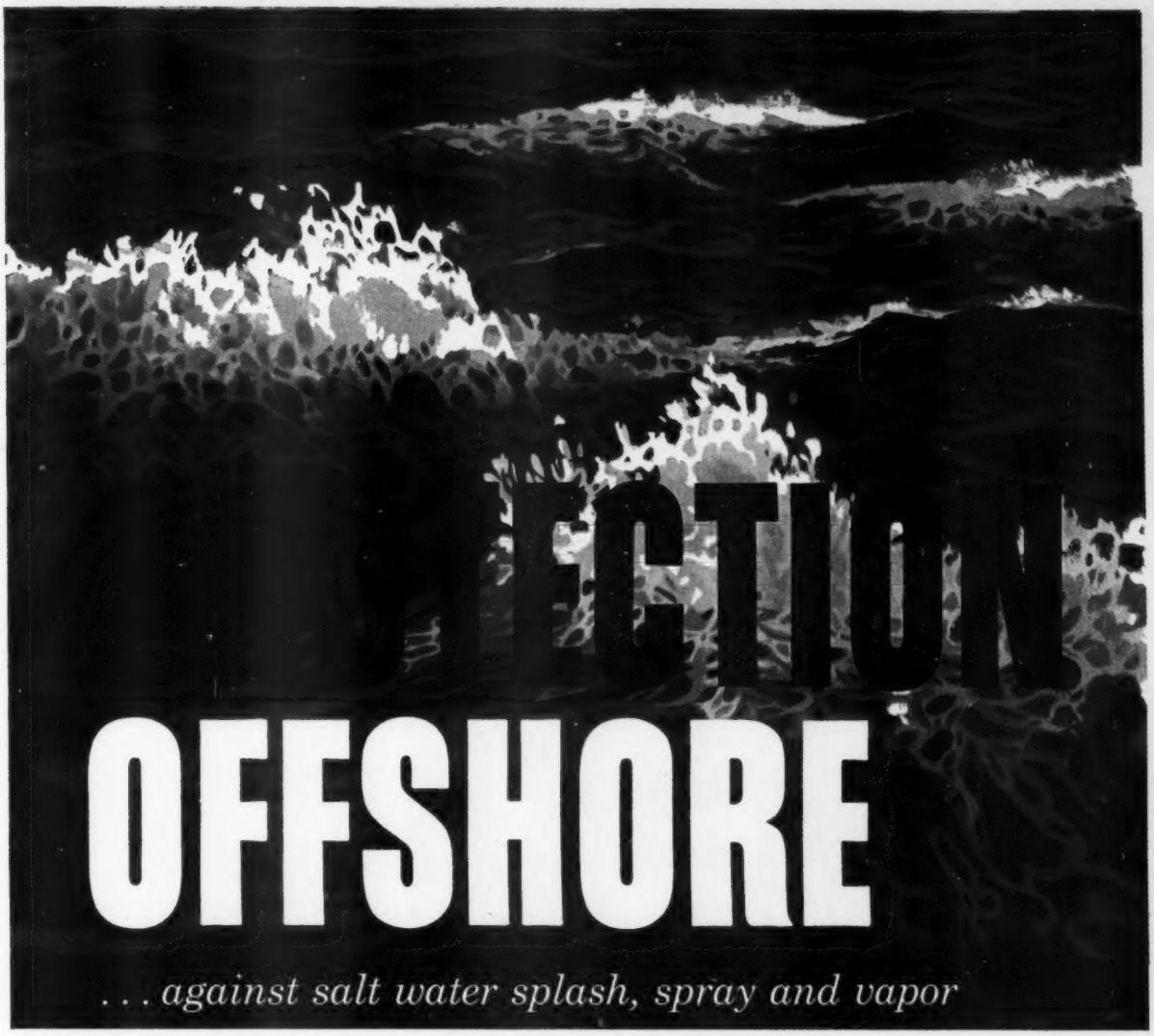
But starting out early like that on a windmill, I've sure pulled my share of sucker rods since. I also drilled some wells—years later—with a little old cable tool rig held together by bailing wire and cusswords. Hit some shallow oil, but it dribbled out. So the only way I finally got into the oil business was backwards—writing about it.

There are sure some fascinating things to write about, too—like the industry's first quintuple completion (five wells in one), covered in this issue, and the fact that you oil country jiggers had better slow up if you happen to be coming from Dallas to Houston, or vice versa, and drive through this town.

Man, they've got a speed trap here that won't quit! We've hollered about it without doing any good—for it's not designed to make driving in this-here city any safer, but to make money. So don't say we didn't warn you if you happen to sashay through our little metropolis with its pretty 6-lane highway, (and radar), before we . . .

See you next month!

Long John Latham



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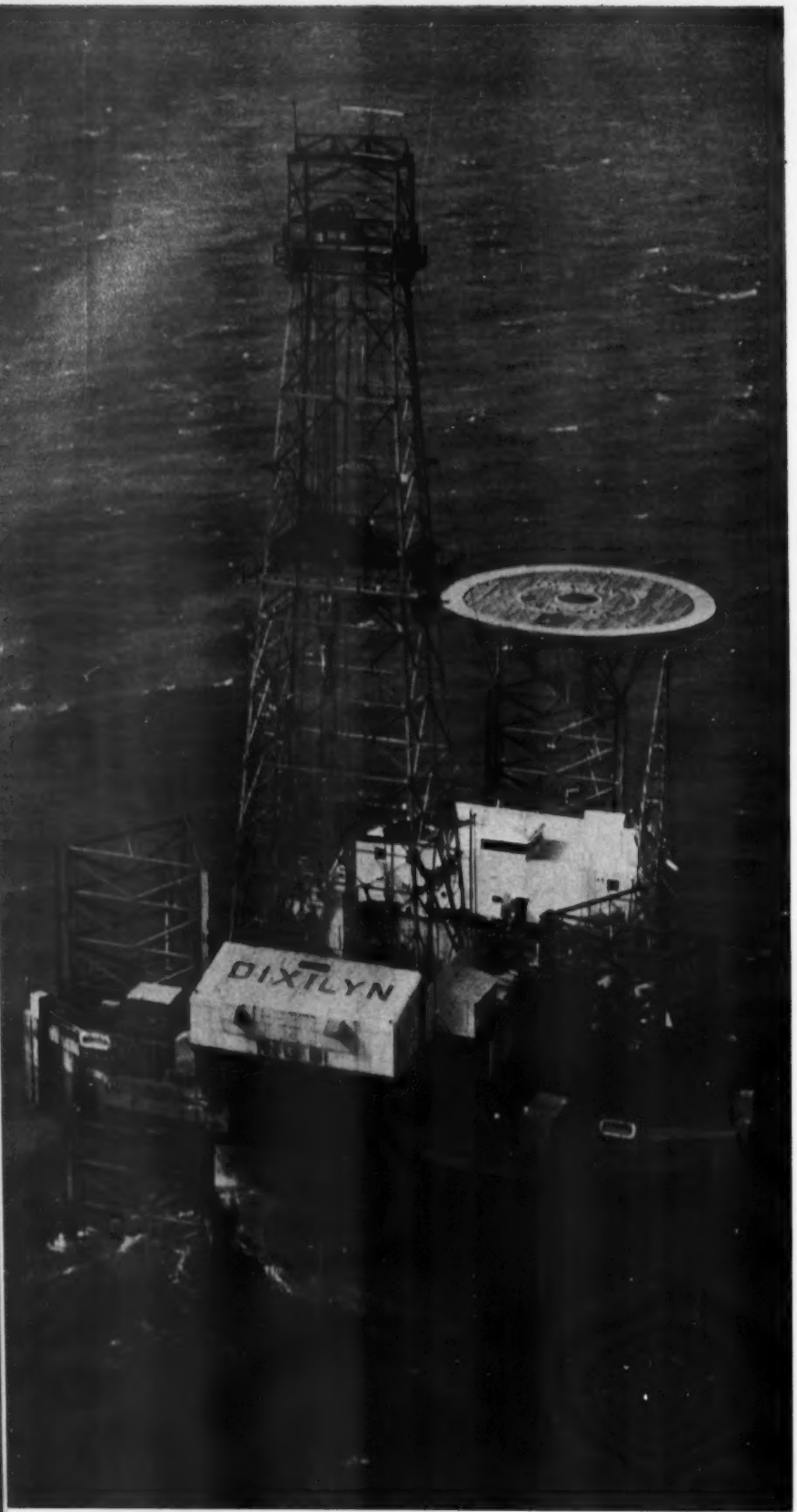


DIXILYN DRILLING CORPORATION'S mobile unit JULIE ANN is shown on location in Block 190, Eugene Island Area, some 40 miles off the coast of St. Mary Parish, Louisiana, where it drilled and completed the world's first quintuple tubing string completion in 72-ft. of water.

Sinclair has . . .

World's First Q

Sinclair Oil & Gas Company recently completed the world's first quintuple string completion.

OCS 0439, Well No. 6, Block 190 Field, Eugene Island Area, off the coast of Louisiana, is the first well in history of the petroleum industry to produce five zones simultaneously from one bore through five strings of production tubing.

The well was drilled to 7,981-ft. on a lease owned jointly by El Paso Natural Gas Company, Peoples Production Company, Sinclair Oil & Gas Company and Sohio Petroleum Company, each with a 25 percent interest. Sinclair is operator for the group, which has already completed an oil well and a quadruple-completion gas well in the area.

Well No. 6 is located 40 miles offshore in the Gulf of Mexico, in 72-ft. of water. It was drilled vertically from Dixilyn Drilling Corporation's self-elevating mobile drilling platform **Julie Ann.**

After 9⅝-in. O.D. 47-lb.-per-ft. production string casing was set and cemented, it was decided to equip the well with five strings of 2⅜-in. O.D. tubing in order to produce five gas zones simultaneously. Two single string packers were run and the two lower zones were completed as alternate zone completions (*see drawing*). When Zone A is depleted, a plug will be run in the No. 1 tubing string and landed in the landing nipple to blank off the lower zone. The sliding sleeve opposite Zone B will be opened, and this zone will be produced through the No. 1 tubing string. The operation will be performed by wire line, eliminating the need for costly offshore workovers when Zone A is depleted.

All six packers run were Brown Oil Tools' Retrievable Hydraulic Set

Quintuple Tubing String Completion

Sinclair has the industry's first five-in-one well—drilled by the mobile unit "Julie Ann" 40 miles off the coast of Louisiana in 72-ft. of Gulf of Mexico Water

Packers. Five of the packers were provided with a hold-down feature to prevent communication between zones when subjected to differential pressure below any packer. A hold-down was not needed on the upper packer.

Preparation

The basic fact that made feasible a quintuple parallel string completion was the technique of simultaneously running five strings of tubing. As the number of parallel tubing strings run in the same bore hole has increased, difficulty has been experienced, especially in deviated holes, in running and stabbing auxiliary strings in the upper packer.

To eliminate this undesirable stabbing feature, Brown Oil Tools pioneered and manufactured the industry's first set of power-actuated multiple string slip-type elevators. A power-actuated multiple slip bowl was also manufactured to retain the five tubing strings in the rotary table while running the tubing.

Running packers

In order to prevent loss in rig time while running packers and tubing strings, sufficient tubing was tallied for the tubing needed below the quintuple packer. Then, with the tally available, spacing was worked out on paper before the job was begun.

The first packer, a retrievable Brown single string Type HS-16-1 packer, was started in the hole on

FIRST FIVE-STRING TREE in place. Pictured is National cross with Cameron Iron Works' Type "F" Wing Valves and two Cameron Quintuple String Solid Block Master Valves. Crew members wear protective clothing against chilly February weather.

Gate Valves With Rotating Seats Used In First 5-String Completion

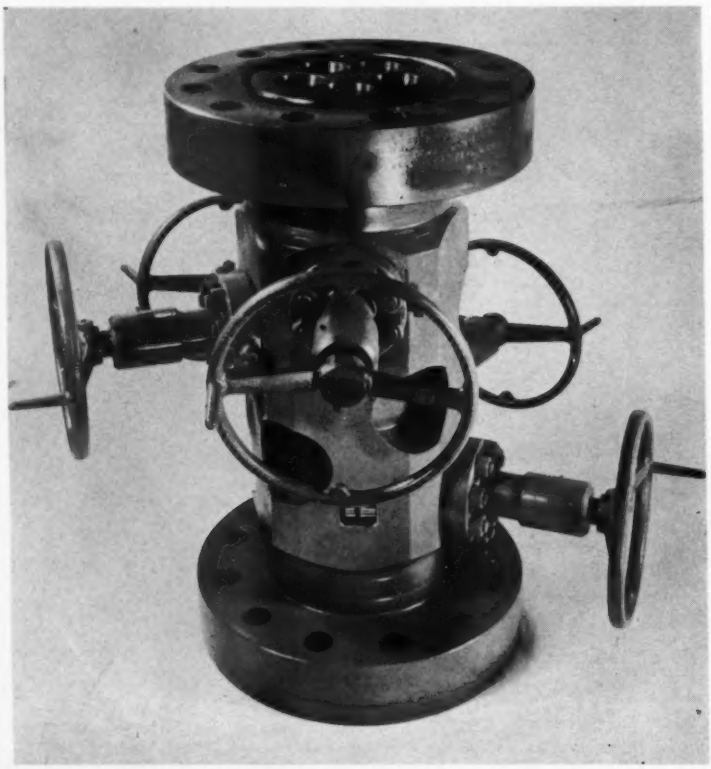
Gate valves of an exclusive design, featuring rotating seats to reduce wear and cut costs, played an important part in the first five-string completion.

The Type "F" Gate Valve—manufactured by Cameron Iron Works of Houston—is readily adaptable to construction in special body configurations to meet requirements for manifolding multiple tubing string completion wells on minimum center spacing. This provides a tremendous advantage to the user in permitting the running of larger strings of tubing inside the smallest possible casing (e.g., 3 strings of 2-3/8-in. O.D. tubing inside all weights 7-5/8-in. O.D. or 7-in. O.D. 26# or lighter casing).

The valves are available in two body styles (master valves and cross-type valves), each in two methods of construction (fabricated block or solid block).

During a research program, Cameron engineers subjected every type of conventional valve to wear by opening and closing against high pressure abrasive flow. In the course of these tests, it developed that the downstream seat on each valve showed the most wear, whereas other sealing surfaces were relatively undamaged.

The engineers came up with a simple new idea in valve design. By rotating the seat of a valve a fraction of a turn each time it was opened or closed, they presented a new surface at the point of greatest wear each time the valve was operated. This principle is the central feature of the new Cameron Type "F" Gate Valve pictured below—a valve, Cameron engineers say, of such unusual durability that it could outlast any valve used in drilling and production service.



Monday, Feb. 29, 1960. A landing nipple and flow couplings were run immediately above the packer. The landing nipple serves as the means to locate and land a plug for blanking off the lower zone when it is depleted.

Next in the string is a rubber sleeve abrasion or blast joint to protect the tubing opposite the producing zone from sand-laden gas which can, in effect, "sand-blast" the tubing, causing holes which could cause communication problems between zones.

Sufficient tubing was run for correct spacing, then another Type HS-16-1 packer was made up in the No. 1 string. Immediately below this packer a Brown Type CC "Criss-Cross" Safety Joint was placed in the string. The safety joint is used to aid, if necessary, removal and retrieving of the packers at a later date.

The same equipment—landing nipple, flow coupling, abrasion joint and sliding sleeve—were run above the second packer. More tubing was run, then a safety joint and a Type HS-8-2C retrievable packer.

In producing multiple-completion wells, one zone may be shut-in while another is producing. Thus, differentials occur across the packers used in these installations. The Type HS-8-2C packer is equipped with a hydraulic hold-down that assures that it will remain set even when subjected to extreme pressure differentials from beneath.

With the No. 1 and No. 2 strings made up in the dual packer, auxiliary equipment was placed in each string and sufficient tubing was run until spacing was obtained for placing the triple packer in the string. A shear pin safety joint was placed in the No. 2 string. A CC safety joint was placed in the primary (No. 1) tubing string, followed by the triple packer. No. 2 tubing string was connected to the No. 2 tubing string mandrel by an adjustable union, with a 14-in. stroke, which facilitated spacing out the No. 2 string between the dual and triple packers,

Coming . . .

In June

"A look at the future and the effect of the recent $483-million Gulf of Mexico lease sales."

Special OFFSHORE Report

and permitted a feasible means of connecting the string without rotation.

With the No. 1 string made up in the triple packer, tubing strings 2 and 3 were made up. Tubing and auxilliary equipment were placed in the individual tubing strings and lowered in the hole to the point where the quadruple string packer was placed in the string. More equipment was run until the quintuple string packer was placed in the string. When the quintuple packer was lowered into the well, approximately 2600-ft. of tubing, packers and related equipment had been run in a total elapsed time of 13½ hours.

Stripper type BOP

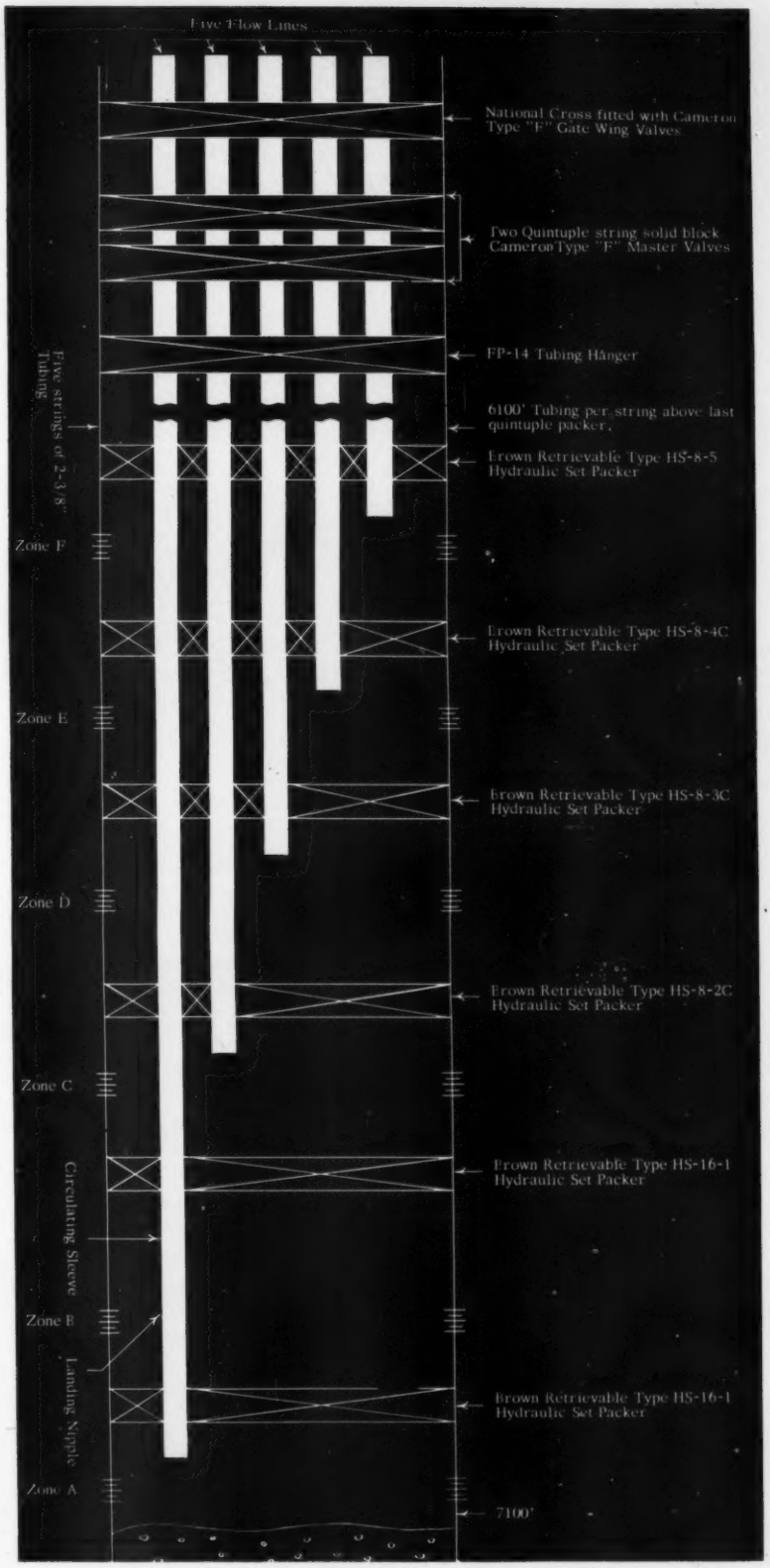
To assure control of the well while running five tubing strings, a Brown stripper-type blowout preventer was flanged into the well. Tubing strings were inserted through five individual openings in the stripper rubber. Metal slip segments internally located in the stripper rubber prevented the tubing from blowing out of the hole in the event of an attempted blowout while running tubing. Well pressure forces the segments to grip the tubing and prevent tubing movement. Tubing safety valves were on the floor for stabbing into each tubing string in the event of an emergency.

Running tubing

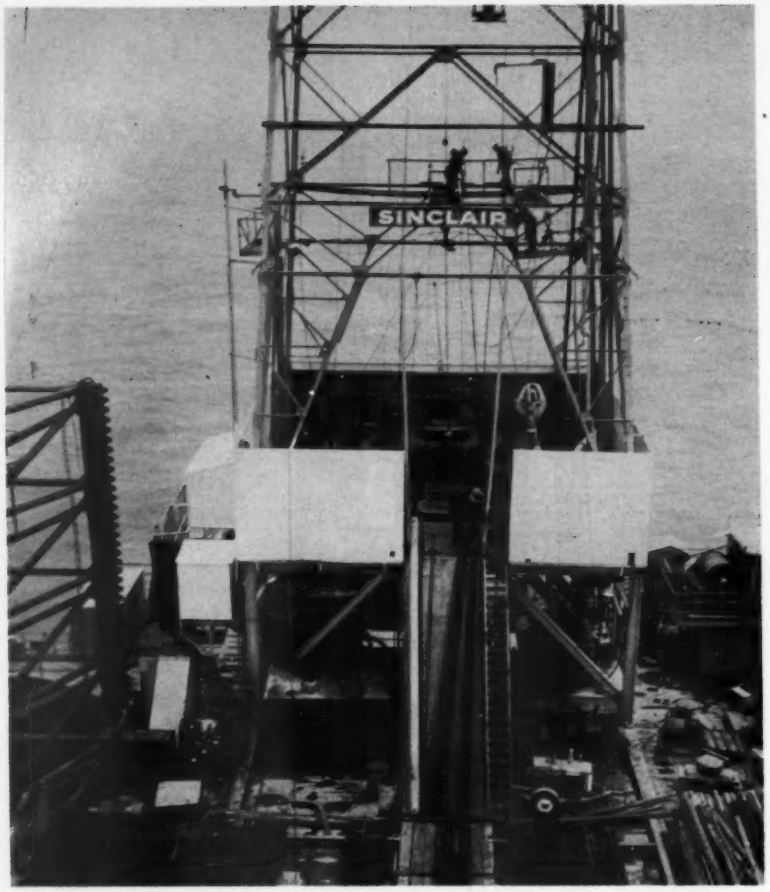
Approximately 30,500-ft. of 2⅜-in. O.D. tubing was run into the hole in 42 hours. Approximately 56 hours of rig time was required from the time the first packer started in the hole. All five tubing strings consisted of 2⅜-in. O.D. extremeline tubing, except some 2⅜-in. O.D. integral 8 Round Thread tubing run in the upper portion of No. 1 string.

Landing tubing

The last joint of tubing in each string was chosen so all five strings would land at the same point. The hanger consisted of a mother hanger with five openings for the individual tubing hangers. The mother hanger was placed on the five tubing strings with the slot openings facing in the proper direction for landing in the tubing head. The tubing string had been properly oriented by orienting No. 1 string when the tubing was first run. With the hook locked the tubing strings remained in the proper position during the running operation. The individual string tubing hangers were made up on the tubing


Five Flow Lines
National Cross fitted with Cameron Type "F" Gate Wing Valves
Two Quintuple string solid block Cameron Type "F" Master Valves
FP-14 Tubing Hanger
Five strings of 2-3/8" Tubing
6100' Tubing per string above last quintuple packer.
Brown Retrievable Type HS-8-5 Hydraulic Set Packer
Zone F
Brown Retrievable Type HS-8-4C Hydraulic Set Packer
Zone E
Brown Retrievable Type HS-8-3C Hydraulic Set Packer
Zone D
Brown Retrievable Type HS-8-2C Hydraulic Set Packer
Zone C
Brown Retrievable Type HS-16-1 Hydraulic Set Packer
Circulating Sleeve
Zone B
Landing Nipple
Brown Retrievable Type HS-16-1 Hydraulic Set Packer
Zone A
7100'

SCHEMATIC VIEW of equipment used in Sinclair Oil & Gas Company's quintuple string completion, OCS 0439, Well No. 6, Block 190 Field, Eugene Island Area, Offshore Louisiana.



THIS IS THE RIG—Dixilyn's JULIE ANN—with which Sinclair Oil & Gas Company made oil industry history. Five strings of tubing are being run to simultaneously produce five gas zones in an offshore well.

"GOING IN THE HOLE" with quintuple string packer. Watching, left to right, are Walt Crandall, Sinclair engineer; John Feeser and Gil Womack, Brown Oil Tools; Bill Roark, Sinclair division engineer; G. A. McDonald, driller, Dixilyn Drilling Corporation; Robert Roberts, Jack Downing and Norman Rogers, Brown Oil Tools.

strings and then landed in the mother hanger. The index pin was screwed into the set position in the tubing head and the hanger was thus properly oriented for installing the Christmas tree. Five joints of tubing were made up in the tubing hangers and the entire hanger assembly landed as one unit.

Christmas tree

The Christmas tree was installed. A Cameron Quintuple String Solid Master Valve was flanged into place. Another identical block was landed and flanged on the first block of valves. Thus, each zone was equipped with Cameron Double Master Valves and Cameron Type "F" Wing Valves.

Setting packers

With the tree in place, the next operation was to displace the mud, replace it with a suitable completion fluid, and set the packers.

Reverse circulation down the casing annulus and out the No. 5 tubing string displaced the 11.7 lb.-per-gal. mud, which was replaced by 11.2 lb.-per-gal. weighted water solution containing calcium chloride. When the casing and No. 5 tubing string had been completely displaced and filled with completion fluid, a plastic setting ball was pumped down the No. 5 tubing string to set the quintuple string packer.

WATCH FOR!
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Tubing pressure was increased to 5000 psi to set the packer. To test the packer from the top side, pressure was built up in the casing to 1800 psi. The pressure was bled off the No. 5 tubing string and the pressure remained constant in the casing, indicating the packer was set and holding from the top side.

The pump was connected to the No. 4 tubing string, and mud was

(*Continued on page* 16)

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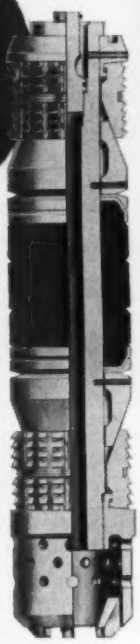

Type BC Wire Line Bridge Plug

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- *Small O.D. for easy running.*
- *Covers wider range of casing weights.*
- *Can be set with any pressure setting tool.*

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WITH TUBING SPOOL IN POSITION, and five strings of tubing in place, balance of quintuple wellhead equipment is lowered over Sinclair Oil & Gas Company's OCS 0439 No. 6 in the Gulf of Mexico. Installation was made from Dixilyn Drilling Corporation's mobile drilling platform JULIE ANN.

displaced out and around the quadruple string packer and out the No. 5 tubing string. This displacement procedure pumped the setting ball to the surface where it was retrieved.

The quintuple string packer was tested from beneath the packer, then the plastic setting ball was pumped down the No. 4 tubing string and the quadruple string packer was set and tested in a similar manner to the quintuple packer.

The displacing, setting and testing procedure was continued until all multiple string packers had been set.

To set the two single string packers, a bronze ball was dropped down the tubing and seated on the shear sleeve below the lowermost packer. Pressure was built up in the No. 1 tubing string to 4000 psi. The shear pin sheared and the ball and shear sleeve fell to the bottom of the hole.

The zones were swabbed in and placed on test.

Fishing job

Announcement of the five-in-one completion has been delayed for more than a month, due to a fishing job. A swab line was dropped into one of the multiple strings, and efforts to retrieve it failed. But the tubing string was pulled and re-run without affecting the other four strings.

Initial Tests

On calculated open-flow potential tests, six zones of the Pliocene formation produced at the rate of 492,000,000 cu. ft of gas per day from depths of 6,156 to 7,104-ft.

The six producing Pliocene sands and their calculated open-flow potentials are:

Zone No. 1—102,000,000 cu. ft. of gas daily from perforations at 7,092-96 and 7,100-04-ft.

Zone No. 2—106,000,000 cu. ft. of gas daily from perforations at 7,055-62-ft.

Zone No. 3—59,000,000 cu. ft. of gas daily from perforations at 6,968-72-ft.

Zone No. 4—69,500,000 cu. ft. of gas daily from perforations at 6,830-36-ft.

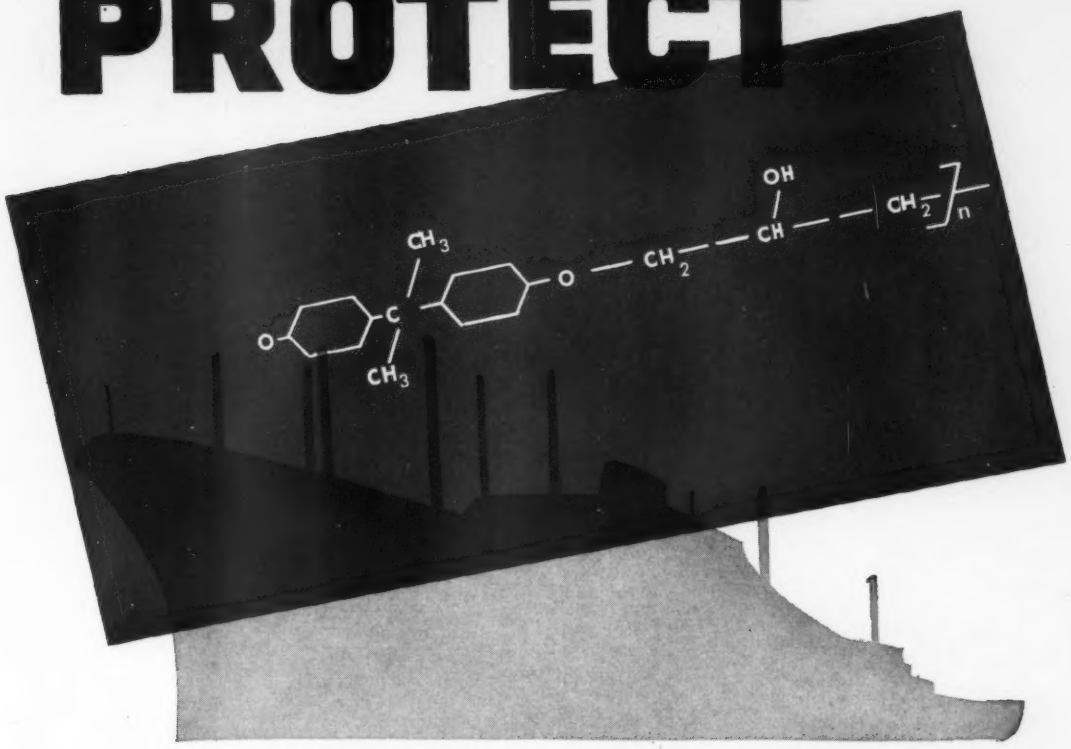
Zone No. 5—30,500,000 cu. ft. of gas daily from perforations at 6,359-65-ft.

Zone No. 7—125,000,000 cu. ft. of gas daily from perforations at 6,156-66-ft.

Design

B. R. Roark, division petroleum engineer for Sinclair's New Orleans division, and L. G. Buchanan, district petroleum engineer, designed the general installation.

PROTECT



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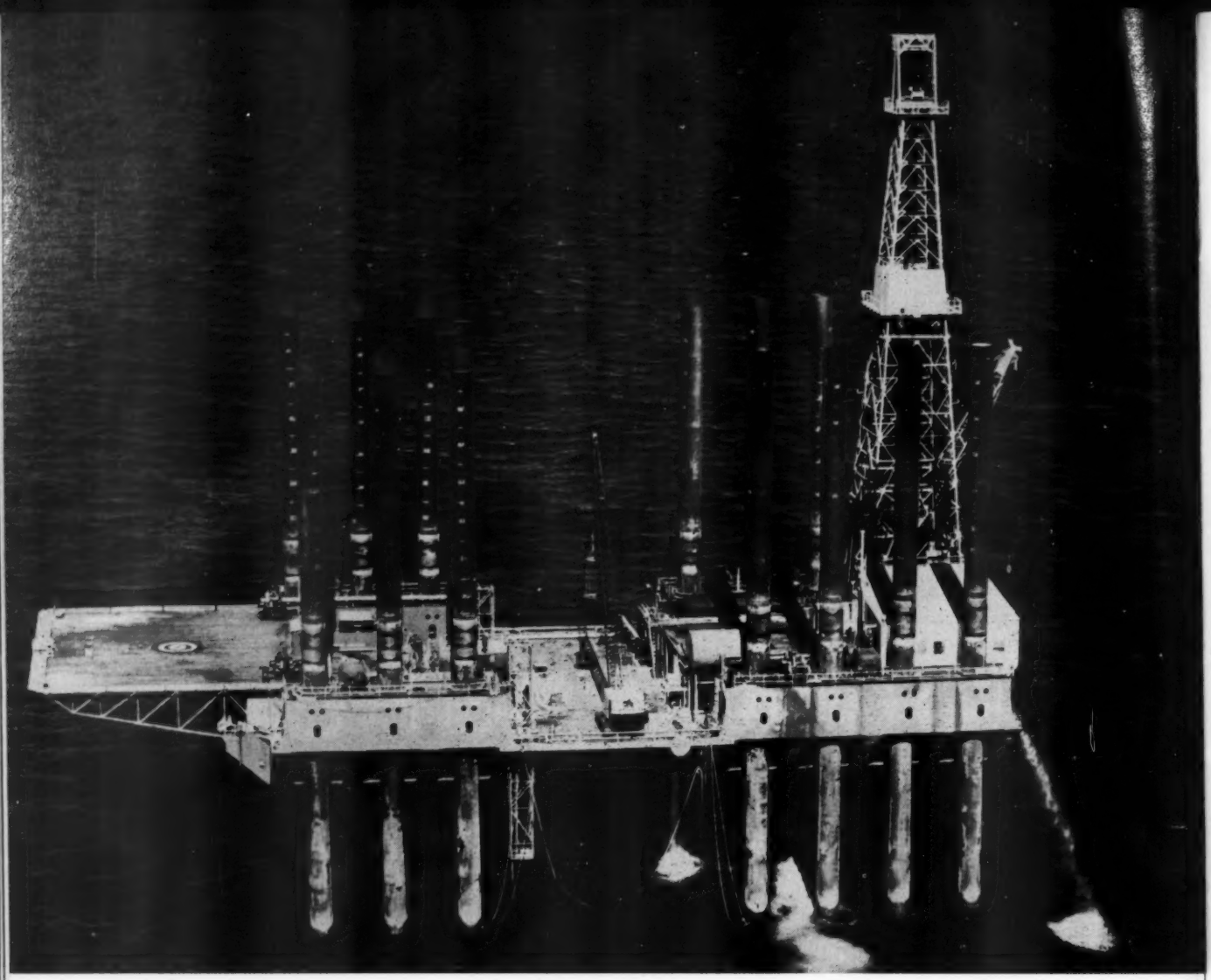


UNUSUAL METHODS LICK CORAL POROSITY

CANVAS SLEEVE AND AERATED SEA WATER SOLVE FLORIDA PROBLEMS

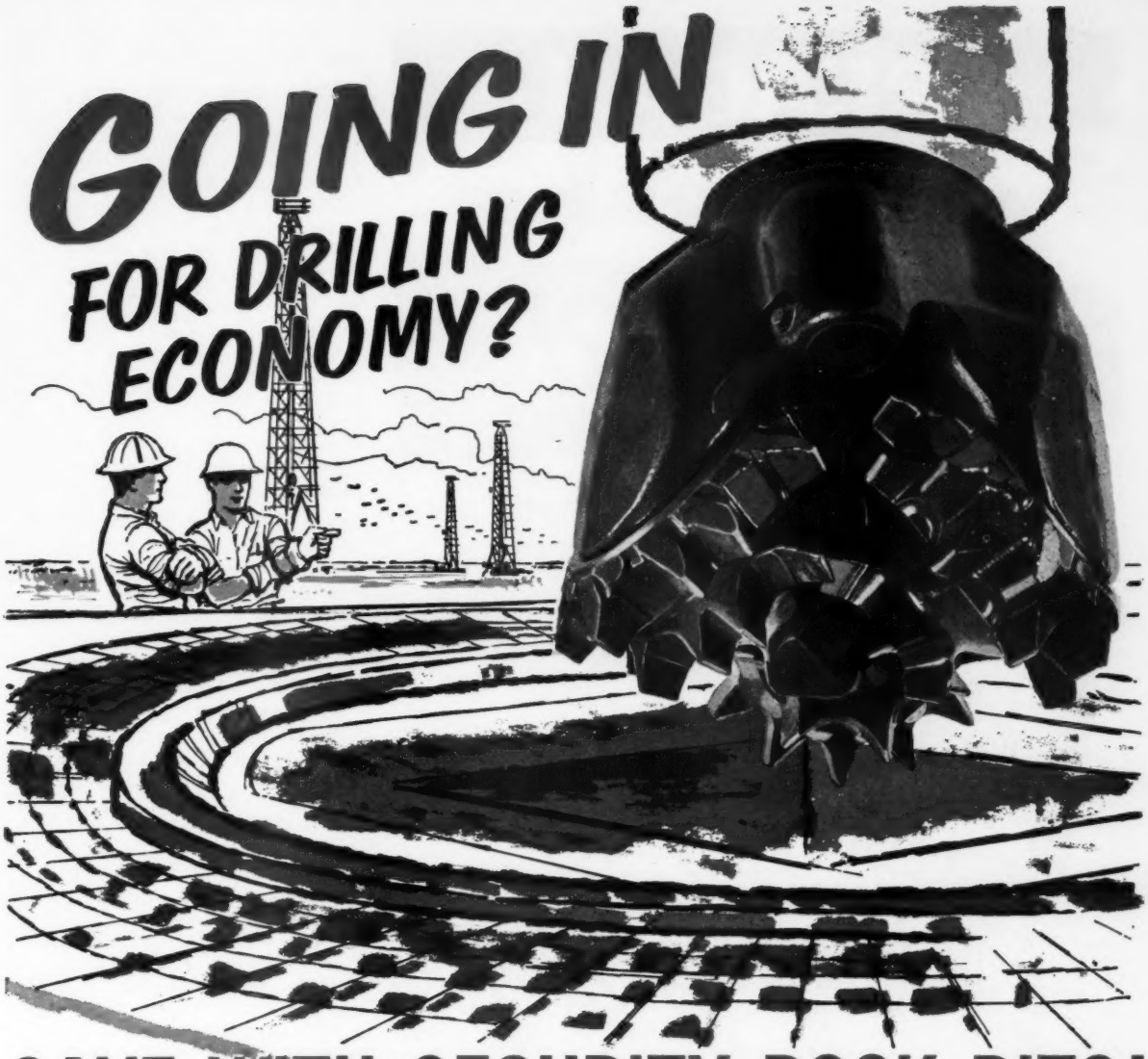
To fight cementing losses in setting casing to a depth of 790-ft. in an offshore test being drilled in the open sea 35 miles southwest of Key West, Florida, engineers on the project inserted a pleated canvas sleeve to line the hole and prevent loss of the column of cement in the highly porous coral formation. Then 20-in. casing was set to 786-ft. and cemented in.

The novel method of attacking coral formation porosity was used by Gulf Oil Corporation on its second Florida offshore test—Marquesas Well No. 1, projected to 15,000-ft. and located 35 miles southwest of Key West on a lease owned jointly by Gulf and The California Company. Gulf is the operator on the well, which is being drilled by The Offshore Company of Baton Rouge, La. The well was spudded in early this year in 36-ft. of water by The Offshore Company's **Rig No. 52,** on the Marquesas OCS Block 28.

Aerated Sea water . . . Porous formations off the Florida coast posed another problem in circulation of drilling fluid. Returns are lost completely in the porous sub-sea formations. To prevent this aerated sea water was used as a drilling fluid at 7,728-ft.

Lime added . . . According to Gulf officials, air lightened the annular column sufficiently to establish returns. The returning column was lightened to such an extent that tremendous quantities of water were actually produced from the hole. Returns were 5 to 10 times as much as the water pumped into the hole. Produced returns helped to keep the hole clean, but lime was added to inhibit corrosion of the drill string and any extra water decreased the lime treatment needed.

Equipment . . . Four WEK compressors and RXD boosters supplied air for the job. The units are rated at 1800 cu. ft. of free air per minute



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Intermediate string . . . After drilling from 790-ft. with a 12½-in. bit to 7,728-ft., engineers decided that sufficient impervious material had been drilled to afford adequate cement fill to anchor an intermediate string of casing. Electric logs were run, 9⅝-in. casing was set to 7,727-ft., and porous formations up the hole were cased off.

Current operation . . . An 8⅝-in. hole is being drilled below 7,728-ft. to the proposed depth of 15,000-ft. A total of 4,670-ft. of 8⅝-in. hole has been drilled in 19 days, at an average rate of 246-ft. per day. Lime-treated sea water is being used as a drilling fluid.

Mud tried . . . Mud was substituted for sea water at 10,000-ft., in an attempt to increase size of the formation cuttings. Mud cut the penetration rate to less than half the average rate for sea water, however, and the mud system was changed back to sea water.

High-speed job . . . The Offshore Company is the contracting company. The drill barge, Offshore's **Rig No. 52,** was towed across the Gulf from Louisiana in 12 days. At 12,500-ft., drilling on the Marquesas Well No. 1 is 51 days ahead of the State of Florida 826-Y Well No. 1, a dry hole drilled 20 miles east-northeast of the present site. The 826-Y well was drilled by Gulf in 1959 to a depth of 15,474-ft. in 117 days, less time than any previous offshore well in Florida waters. The new well, if drilling continues at the present rate, will beat this record by almost two months.

PUTTING HEADS TOGETHER over problems presented by porous coral strata are Offshore Company's toolpusher J. F. Paul, left, and Gulf's area drilling foreman Charles Laas.

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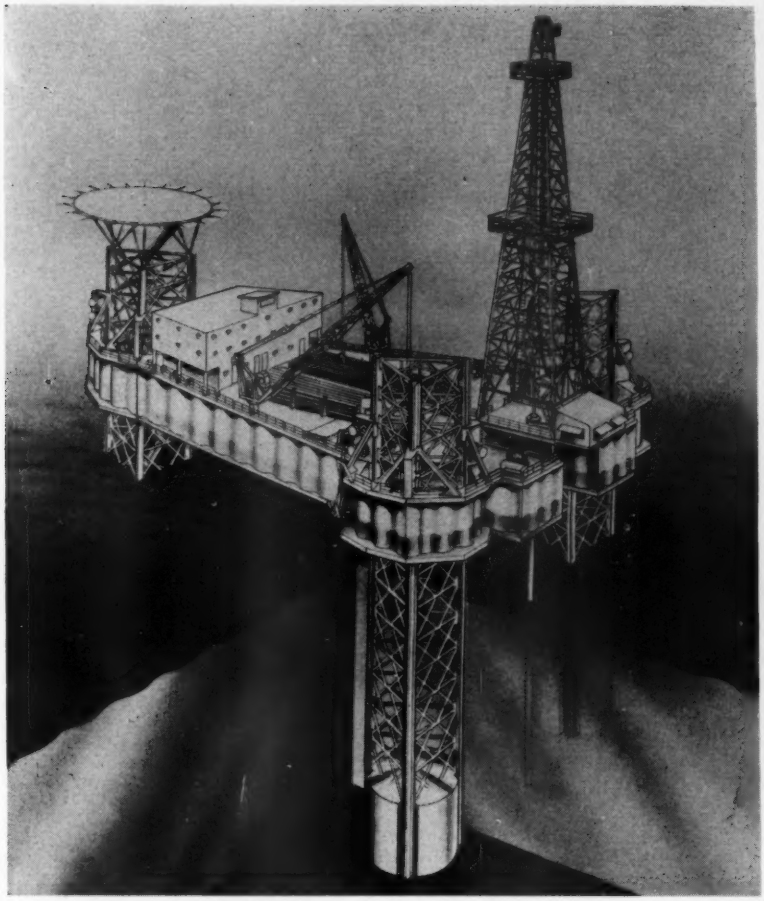

MOBILE DRILLING PLATFORM will be built in Italy, with key components and technical guidance furnished by an American manufacturer. It will be the second offshore unit for ENI, the state-owned oil monopoly.

RIG TO BE BUILT IN ITALY

ENI STEPPING UP SEARCH FOR OFFSHORE OIL

Ente Nazionale Idrocarburi (ENI), the Italian state-owned oil company, plans to step up its offshore drilling program with a new mobile drilling platform to be built in Italy with key components and technical guidance to be furnished by an American manufacturer.

The tripod-type platform will be assembled by Nuovo Pignone, an affiliate of ENI, and the possibilities of assembling additional platforms in Italy will be explored after completion of the unit in 1961, according to an announcement.

Construction will be carried out at Nuovo Pignone's plant at Massa, on the north coast of Tuscany, and at the nearby port of Marina di Carrara. After completion, it will be turned over to SAIPEM, another ENI affiliate. Where SAIPEM will operate the three-legged mobile unit has not been disclosed, however, the ENI group holds concessions in the Mediterranean, the Adriatic and the Persian Gulf (see related story on page 19).

The new platform will be the largest LeTourneau-type ever constructed, and will be the second mobile unit to be operated by the Italian concern. The first, the **Scarabeo**, was used by SAIPEM to drill a discovery well in the Mediterranean off the coast of Gela, Sicily, and operates in conjunction with a tender.

The new marine drilling rig will contain living quarters for a crew of 50 men, and will provide enough storage facilities to enable it to operate in remote areas without frequent deliveries from supply boats.

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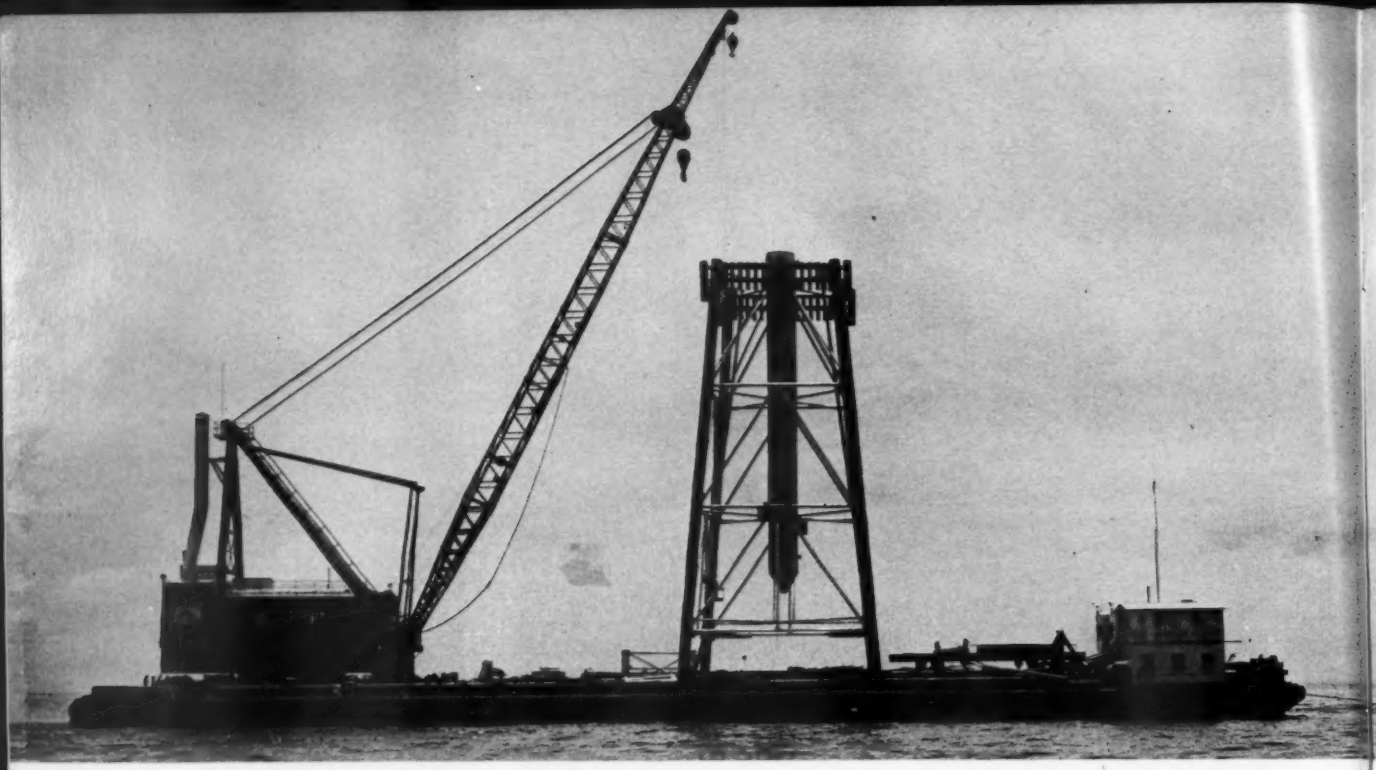

BIG LIFT RAISES SEPARATOR DECK as the flow station is readied for the long move from Bayou Boeuf in Louisiana to Lake Maracaibo. This deck carries the separators that will test each horizon flow individually in sequence. The room, forefront, houses part of the intricate electronic relay system that operates the station. Already on the barge are the pump deck and caisson deck. Pipes and connections are painted in special individual colors to make re-assembly easier.

ALUMINUM SUBSTRUCTURE AND SURGE TANK are carried aboard the derrick barge that will assist in the assembly once the station arrives at Lake Maracaibo. The surge tank is a 91-ft. 7-in. cylinder 96-in. in diameter with a tapered bottom

open to
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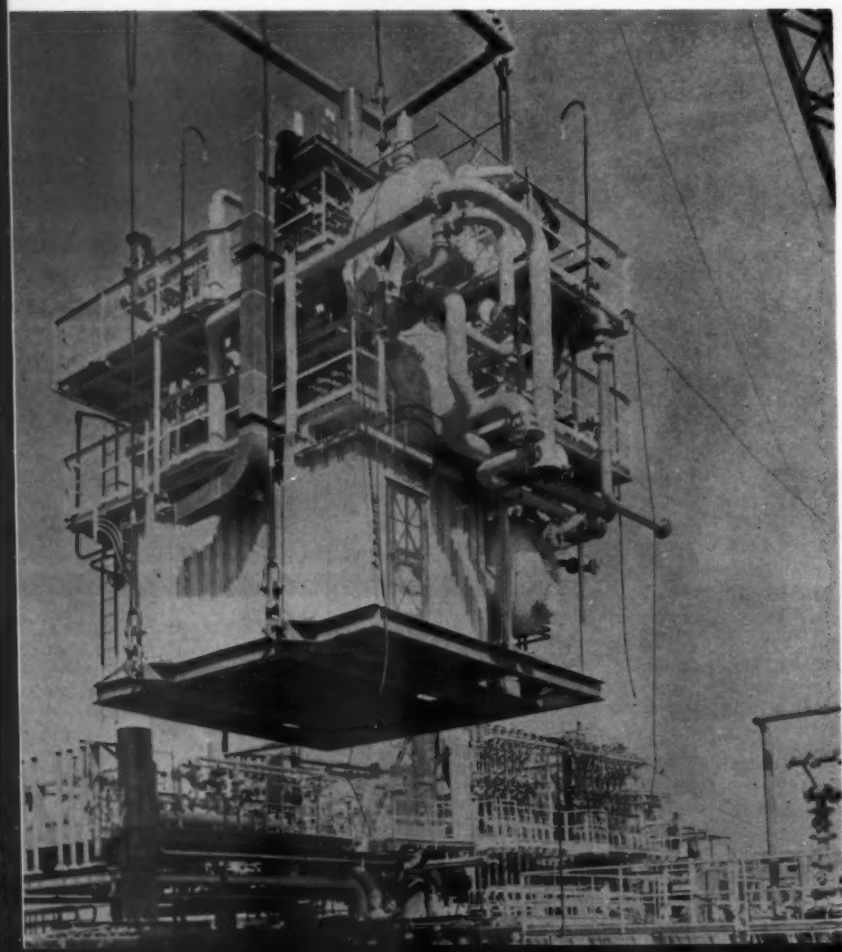
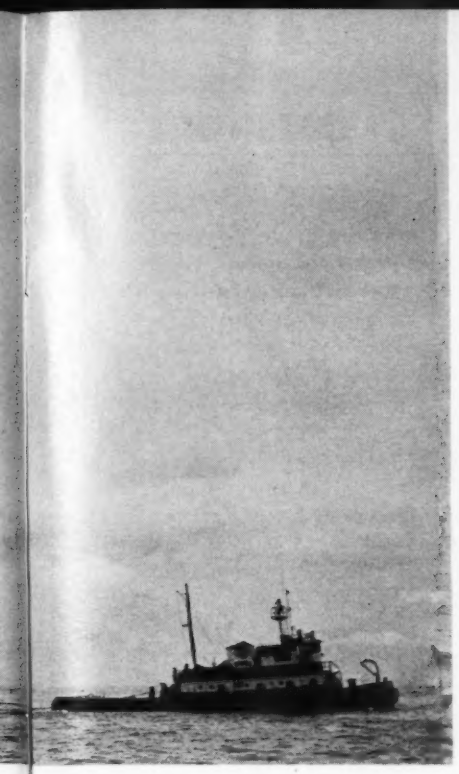


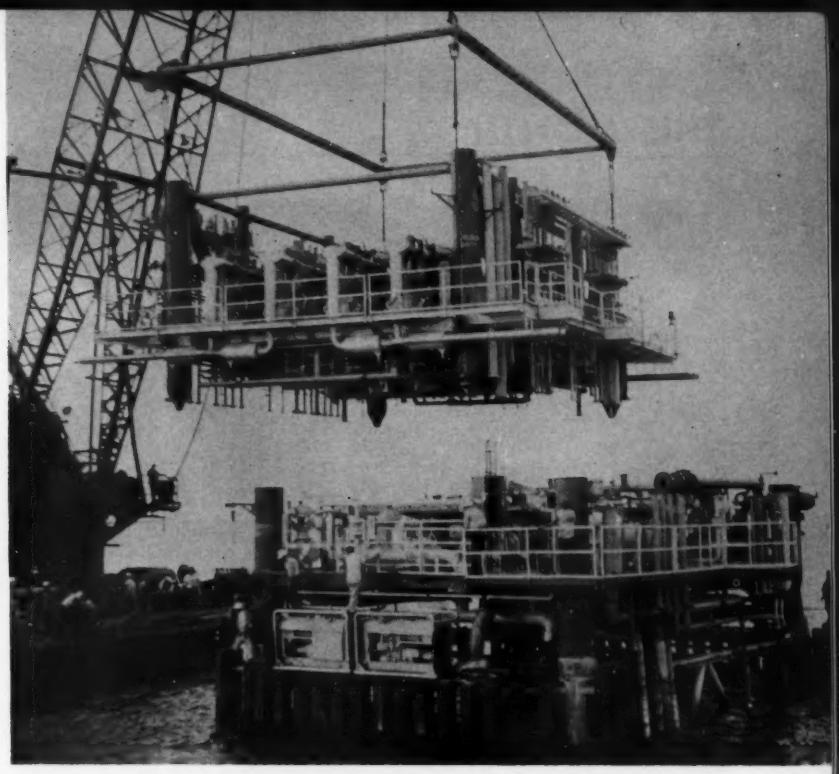
AUTOMATED FL

THIS SELF-POWERED STATION TEST

Now in the final stages of construction in Lake Maracaibo, Venezuela is one of the most completely automated offshore flow stations ever developed. Designed to handle production from 46 completions (some are dually completed wells) with a capacity of 100,000 bpd, the flow station powers itself from residue gas, regulates the flow of each individual completion, tests each well to determine flow rate of gas and oil, separates gas and oil, and tests specific gravity and basic sediment and water of the oil. It records all this on tape and can type out its own reports. It regulates all its own parts and even makes minor corrections and adjustments of its parts or in any well operation. If something goes wrong with any one well, the flow station,



open to the sea to relieve the hydrostatic pressure caused by wave action. Serving as reservoir, it provides surge volume between separators and booster pumps and disengaging space for gas before the oil is pumped 35 miles to shore storage.



PUMP DECK IS SET IN PLACE atop the substructure and caisson deck. The cone-shaped points at the corners are stabbing points that fit into columns in the lower deck. This will accurately align the numerous pipe connections between the two decks. Eight LeRoi natural gas engines for the pumps and two driving 150 KW generators run on residue gas from the separation.

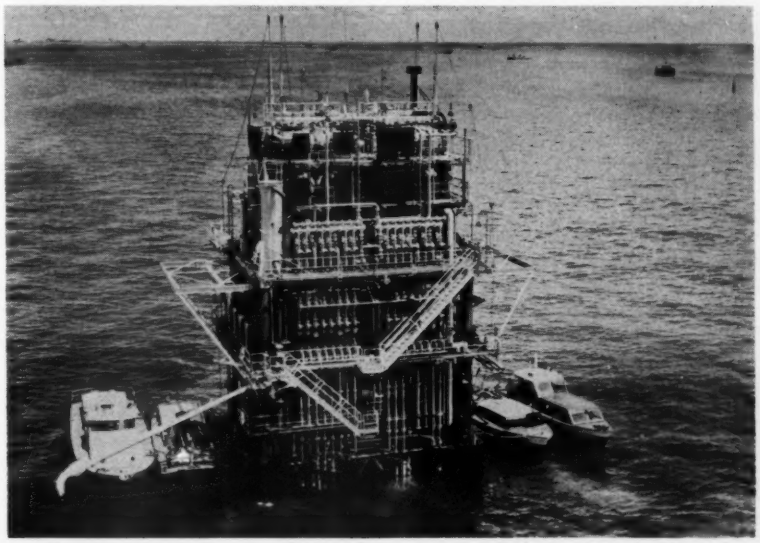
FLOW STATION FOR VENEZUELA

TESTS, SEPARATES 100,000 BPD PRODUCTION WITHOUT HUMAN SUPERVISION

during sequential testing, will detect the trouble and either correct it or shut in the well, making a complete report of the trouble. If there is a fire or other immediate and urgent trouble, the flow station radios to a land base for human help.

The electronic-mechanical marvel was designed and engineered by J. Ray McDermott & Company, Inc., of New Orleans, and constructed on Bayou Bouef in South Louisiana for Venezuelan Sun Oil Company. It was erected by McDermott on a concession operated by Venezuelan Sun in Lake Maracaibo for Sun and its partners, Venezuelan Atlantic Refining Company and Texaco-Seaboard Inc.

The electronic brain for the flow station was built by Texas Instruments, Inc. of Houston.



COMPLETED AND READY FOR TESTS, the 30- by 40-ft. flow station rises 83-ft. above the lake surface. The major portion of the "mechanical brain" that will operate the station is on a platform a mile away at the junction of pipelines for this and other contemplated stations in Lake Maracaibo. This junction platform is the take-off point for the 35-mile main transmission line to shore.

NEW OFFICERS OF THE OFFSHORE OPERATORS COMMITTEE study a map of oil and gas leases in the Gulf of Mexico. Left to right: J. W. Pittman of Shell, chairman; A. J. Laborde of ODECO, vice chairman, a new position; and Rex Alford of Conoco, secretary.

Offshore Operators Committee . . .

Elects New Slate Of Officers

Expanding activity calls for new office; Laborde is named to newly created post.

The Offshore Operators Committee, a voluntary group of oil operators owning leases in the Gulf of Mexico, re-elected J. W. Pittman, Shell Oil Company, New Orleans, as chairman, and Rex Alford, Continental Oil Company in Houston, as treasurer. A new position was created —that of vice-chairman—and A. J. Laborde of Ocean Drilling & Exploration Company of New Orleans, was named to the new post.

Although the Offshore Operators Committee was started primarily to study common problems of exploring for and producing oil from under the Gulf of Mexico, it has consistently expanded its sphere of activity since its inception in 1948. Composed of 32 firms owning mineral leases in the Gulf, the OOC has become an unofficial or semi-official adjunct to various government agencies dealing in regulatory matters relating to production in the Gulf, and serves the agencies in an advisory capacity.

Most notable has been its work with the U. S. Coast Guard in setting up safety regulations on offshore structures, especially as these pertained to aids to navigation. As evidence of the increasing importance of the work OOC is doing, it participated in formation of the National Offshore Operations Advisory Panel to the commandant of the United States Coast Guard, Vice Admiral A. C. Richmond. Of the 15 members of this panel, 10 represent companies that are OOC members.

Canada

Lake Erie Communities Want Ban On Offshore Drilling

Virtually every Ontario town and township along the oil-rich north shore of Lake Erie has endorsed resolutions calling for a ban on drilling operations in the Great Lakes until studies indicate whether such operations cause pollution and resulting damage to both the commercial fishing and tourist industry.

There are at least 100 gas wells in production in Lake Erie and, until the recent Colchester discovery "of major importance," residents along the north shore had made no objection to offshore drilling. The "major importance" tag to the new discovery well in Colchester was applied by A. R. Crozier, Ontario Fuel Board chairman.

The issue has landed in the lap of a three-man board set up by Premier Leslie Frost to study Ontario oil and gas production. D. A. Stuart, head of the Ottawa office of the Canadian Petroleum Association, will present to the government industry briefs on behalf of offshore oil and gas producers, Frank Coste, president of Consolidate West, Marsh Cooper, head of Long Point, Cliff Smith, head of Place, and J. F. Paxton, vice president of Midcon, head the association.

Caracas

National Oil Company May Take In Partners

The projected national oil company of the Venezuelan government is reported due to get a large L-shaped block in Lake Maracaibo that will enclose and offset present concessions on the west and south sides. The government-sponsored company is expected to take in private enterprise partners, companies now holding offset leases, for joint operation of the concession.

While this would be a new arrangement in Venezuela, such set-ups have been made in other countries. From oil companies in Caracas comes reports that they are not opposed in principle, but so far terms of the proposed joint operation have not been announced. Decisions to participate as partners with the national company must wait clarification of how production and costs are to be shared.

Since the new national company has been budgeted with an initial operating capital of only $750,000, there is some speculation among oil executives as to whether it would ask its free enterprise partners to market its share of the crude. Also, some suspect the national company might want its partner to finance development and take crude in payment.

Does an expenditure of almost

$425,000,000

in just one year mean

ANOTHER OFFSHORE BOOM?

This sum, huge even by oil industry standards, has been paid by the nation's leading oil companies since February, 1959, just to obtain the **right to drill** in Louisiana and Texas offshore areas!

It went like this: Approximately $43,000,000 in leases purchased in February, 1959; $6,500,000 in August; $88,000,000 in September, and, these big payments topped manyfold by a whopping $285,000,000 paid out February 24, 1960.

NOW WHAT?

Logic insists there can be only one answer—that the present strong upsurge in offshore activity, which first became evident in mid-1959, will be greatly accelerated in the days and months which lie directly ahead.

BUT . . . to get specific answers to this vital question, OFFSHORE magazine has gone directly to oil industry leaders, representing operators, contractors, suppliers and other informed sources and will present their views in a comprehensive special feature to appear in the June issue of OFF SHORE magazine.

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California

Shell Seeks Offshore Leases

Company nominates nine parcels, totaling 50,000 acres, off Santa Barbara County

For the first time in two years, a major oil company has evidenced an interest in new leases off the California coast. Shell Oil Company has nominated 50,000 acres off Santa Barbara County, California, and asked the State Land Commission to put the acreage—nine parcels in all—on the auction block.

With the Shell nomination under study, the commission has indicated that it would like any other company with an interest in the state's tidelands to make itself known. There are no other nominations pending before the commission, at the moment.

Five blocks . . . The parcels nominated by Shell are five major blocks alternating between those already leased, plus one adjacent to the Elwood field. However, in the company request to the commission, Shell has divided the tracts into nine parcels.

1958 sales high . . . The five 3,840-acre parcels in the 1958 lease sales brought a total of $55 million in cash bonuses. Of this, $40 million went to the state's development fund for the furtherance of the statewide water program, $12 million to the state's Division of Beaches and Parks, $300,000 to the Veterans Dependent fund, and $100,000 each to the Soil Conservation Commission and Board of Forestry.

Law changed . . . Should Shell's nomination eventuate in an actual sale, leases will not necessarily go for cash bonuses. The law has been changed since the 1958 sale, and the state can offer acreage on a cash bonus bidding, straight royalty bidding, or a combination of the two.

Original five parcels . . . Parcel A, farthest east, and Parcel E, farthest west, went to a combine of Phillips Petroleum Company, Kerr-McGee Oil Industries, Inc., Edwin W. Pauley and 37 other companies and individuals, for which Phillips is the operator. One core hole has been drilled on Parcel A to 7,385-ft. in 180-ft. of water. Nothing has been released on the results, but the operator has indicated that it has been capped so as to permit re-entry. Phillips has also intimated that it may start operating on Parcel E with a mobile drilling barge converted to a permanent drilling platform.

Record bid . . . Parcel D attracted a record bid of $23,711,538 or $6,175 an acre, topping anything on the West Coast or in the Gulf. Texaco Inc., Monterey Oil Company and Newmont Oil Company were the successful bidders, with Texaco the operator. Early coring brought in one well that tested at the rate of 1,383 bpd of 35°-gravity crude. Texaco and partners plan a 28-well, double-decked drilling platform to be built in 94-ft. of water. The top deck, 130-ft. by 138-ft., will be 50-ft. above water. The platform is expected to be ready about mid-July.

To drill from land . . . Parcel C, owned jointly by Standard Oil Company of California and Humble Oil & Refining Company, will soon have a land-based, slant-drilled wildcat if plans of the operator, California Standard, mature. No plans for plat-

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form-type operations are being considered, it is understood.

Parcel B, also owned jointly by California Standard and Humble, has not had any commercial shows as yet. One core hole drilled failed to show anything.

May act on own . . . The State Land Commission may be stimulated by Shell's action into offering additional acreage on its own, as it is empowered to do by law.

Japan

Gas Well Directionally Drilled From Coast

A well drilled directionally from the coast has been brought in as a gas producer by Teikoku Oil Company, chief producing company of Japan. The company already has a large gas field 50 miles north of the discovery well.

According to reports, Teikoku will now undertake offshore drilling to determine the extent of the new field.

The new well, in the Kubiki field, is estimated as being capable of producing over half a million cu. m. per day of dry gas, compared with only about 1,500 cu. m. per day from other wells in the area. Two pay zones were at 3,140-ft. and 3,340-ft. The small demand in the local market, however, will probably limit production on the well, at least temporarily.

Lake Maracaibo

Wildcat By Phillips Is Lake's Deepest Producer

Phillips Petroleum has announced completion of the deepest producing well in Lake Maracaibo, Venezuela—a wildcat in Block 17 producing from 14,460-682-ft.

The new well is 2.6 miles from nearest production. It produced 30.9°-gravity crude at the rate of 2,616 bpd on a six hour test. Shallower zones will be tested before completion.

Louisiana

Stowaway On Tender Gets Crewman "Seeing Things"

Recently drilling crew members of the California Company tender S-22, which is working in the Bay Marchand area, found a strange stowaway aboard. At the midnight change of tours one crew member came down the deck and reported that there

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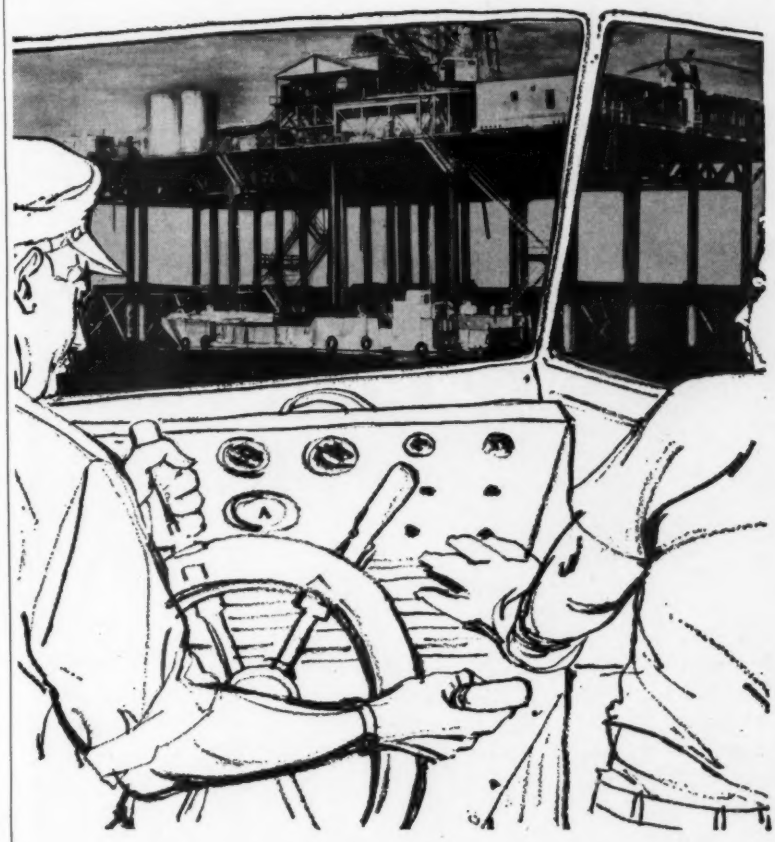

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was a snake on the starboard side of No. 1 hatch. Others scoffed at the report and accused him of "seeing things" from watching too many wild animal TV shows.

Nevertheless First Mate Mark Bolding investigated and found a 15-in. rat or garter snake, coiled and ready to attack. He dispatched it with a broom handle. Later he said he surmised it came aboard with a load of supplies.

Free First Aid Courses Offered Offshore Crews

Paul M. Hanahan, safety engineer with the U. S. Bureau of Mines, has just completed a series of first aid training courses for crews on board the Ocean Drilling & Exploration Company rigs **John Hayward, Mr. Charlie, St. Louis, El Dorado** and **Margaret,** as well as Dixilyn Drilling Corporation's **Lou Ann** and several Reading & Bates Offshore Drilling Company rigs.

The course, designed to prepare offshore drilling crews for emergencies, is offered free as part of the bureau's safety and health program. The only cost to offshore operators will be transportation for Mr. Hanahan from shore to rig. Requests should be addressed to Paul M. Hanahan or G. M. Kintz, U.S. Bureau of Mines, Health & Safety Division, Room 1602, 1114 Commerce St., Dallas 2, Texas.

McDermott Brings In Gas Well Off Cameron

In the southwest area of Block 33, West Cameron area, J. Ray McDermott & Company has brought in the company's C-1 well making 4.5 million cu. ft. of gas daily through a 10/64-in. choke with 8200 lbs. pressure from perforations between 14,940-55-ft. Gas-distillate ratio was 40 bbls. to the million cubic feet of gas.

At the same time the company announced completion of three oil wells in three different fields in Alberta, Canada.

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New York

Joint API-AGA Meet Discloses 1959 Figures

At a joint meeting of the reserves committees of the American Petroleum Institute and the American Gas Association with the Canadian Petroleum Association, figures were presented to show that the U. S. oil industry has brought the nation's proved recoverable reserves of crude oil, natural gas liquids and natural gas to an all-time high in 1959, and that Canada has upped its reserves over 1958 by better than 14 percent.

Increases were also noted in the production of supplies of liquid hydrocarbons and natural gas, a sharp reversal of the previous year when production was down.

Highlights of the API-AGA committee reports covering the year ending December 31, 1959, and representing estimates of the reserves committees of the two organizations are:

Crude oil: 31 billion 719 million barrels, up 1 billion 183 million over 1958;

Natural gas liquids: 6 billion 522 million barrels, an increase of 318 million over the previous year;

Total liquid hydrocarbons (crude oil and natural gas liquids): 38 billion 241 million barrels, up 1 billion 501 million over 1958;

Natural gas: 262 trillion 597 billion cubic feet, an increase of 8 trillion 455 billion over 1958.

Production

The reserves committees estimated production of crude oil at 2 billion

483 million barrels, up 110 million over 158; natural gas liquids at 385 million barrels, an increase of 44 million; and total hydrocarbons, 2 billion 868 million barrels, up 154 million over the previous year.

Natural gas production rose 956 billion cubic feet to a 1959 total of 12 trillion 441 billion cubic feet.

Discoveries

As in other years, a large percentage of the increase in total liquid hydrocarbon reserves came from extensions and revisions of previous estimates covering pools and fields discovered prior to 1959. This results from the fact that no field of any consequence is ever fully developed during the year in which it is first discovered.

For this reason, new discoveries during a given year are as a rule very small in comparison to the reserves later developed in the same fields through further drilling effort and increased knowledge of reservoir characteristics.

ITALIANS HIT IN PERSIAN GULF

SIRIP HAS 3,500 BPD WELL OFF COAST OF IRAN

A 7,550-ft. discovery well, drilled 10 miles off the coast of Iran in the Persian Gulf, may usher in a spectacular new Middle East oil field.

The well, which reportedly produced 3,500 bpd on initial tests, is on a concession owned by Soc. Italo-Iranian des Petroles (SIRIP), wholly-owned subsidiary of Ente Nazionale Idrocarburi (ENI), the Italian government oil monopoly.

The concession is one of three for which Enrico Mattei, head of ENI, broke the traditional 50-50 split to obtain.

To acquire the concessions, ENI agreed to share profits 50-50 with National Iranian Oil Company, plus a further 50-50 split of the remainder with the Iranian government, leaving the Italian state-owned oil company with the short end of a 75-25 split. Since ENI, through SIRIP, must bear all exploratory and development costs, it will take a high-volume producing field for the Italians to break even.

First try . . . SIRIP has apparently made a major strike on its first try. The well was spudded in on the 2,160 sq. mile concession last October (*see Offshore, Nov., p.* 12) from a self-contained platform erected by Micoperi, S.p.A. of Milano, Italy. It was completed early last month, according to reports from Rome and Iran, producing 3,500 bpd on initial tests.

Other concessions . . . SIRIP has two other concessions in Iran—a 4,360 sq. mile area in the Zagros Mountains, adjoining the consortium area on the east, and a 2,320 sq. mile area along the coast of southern Iran, extending into the Gulf of Oman.

The first wildcat is being drilled in the Zagros area from the top of Mount Sequta, at an elevation of 8,200-ft. No activity is in progress on the third concession.

Rome jubilant . . . Rome is reportedly jubilant over the Persian Gulf discovery, since it seems to indicate that the new offshore field may live up to advance billing as a heavy producer.

No-Wall-Stick Drill Collars

The surface area of these drill collars has been changed to reduce wall contact area by more than 40%. Weight loss of the drill collar is only about 4%. Reduction of 40% in contact area results in a proportionate decrease in the total sticking force due to differential pressure of 40%. This design also gives a section of pressure equalization each foot along the body of the drill collar.

Three sizes (6", 4½", 4¼") of NO-WALL-STICK DRILL COLLARS are available on a rental basis in the Texas and Louisiana Gulf Coast area. Rental price of these NO-WALL-STICK DRILL COLLARS is very competitive to conventional drill collars run with stabilizers.

Any new or used drill collars, regardless of size, owned by Drilling Contractors or Oil Companies may be converted to NO-WALL-STICK DRILL COLLARS for a fixed conversion charge.

NO-WALL-STICK DRILL COLLARS offer far more protection from wall sticking in high angle holes or holes which have shale wash outs than drill collar strings using stabilizers.

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No-Wall Stick Drill Collars may be handled through your local rental tool company.

Peru

Richfield—Cities Service Resume Offshore Operations

Richfield Oil Corporation, in a joint venture with Cities Service Oil Company, has resumed offshore drilling in the discovery area off the northwest coast of Peru.

So far five tests have been drilled to depths between 900 and 5,200-ft. Of these, three flowed 38°-gravity oil at rates up up to 414 bpd on test, including one that flowed 340 bpd from a depth of only 920-ft.

Trucial Coast

Third Producer Brought In By Abu Dhabi Marine Areas

Off the Trucial Coast, Abu Dhabi Marine Areas, Ltd.—owned two-thirds by British Petroleum and one-third by Compagnie Francaise des Petroles—has brought in its third successful well with the drill barge **Adma Enterprise.**

Umm Shaif No. 3 made 5,000 bpd on initial tests from approximately 9,500-ft. It spots two miles east of the 1958 discovery well in the Persian Gulf, and is doing much better than Umm Shaif No. 2, reportedly making 1,000 bpd.

Venezuela

Sun Has Two New 5,000 BPD Lake Producers

Two new oil wells, producing 5,000 bpd each, have been announced by Venezuelan Sun Oil Company. The new wells are on a Lake Maracaibo concession in Block No. 12, which Sun owns jointly with Venezuelan Atlantic Refining Company, Texaco-Seaboard Inc., and Pan American Petroleum Corporation.

Sun also stated it had extended proven production of its other Lake Maracaibo concession in Block No. 1, with completion of a step-out well which tested about 5,000 barrels daily.

One Billion Barrels Of Oil Mark 1959 Production High

In 1959 Venezuela produced 16 percent of the world's oil—approximately one billion bbls. The daily average amounted to 2,771,000 bbls. The free world produced about 16.5 million bpd, of which the United States contributed 7 million bpd and the Middle East 4.7 million bpd. Communist nations are said to be producing about 3 million bpd.

• • •

New Gulf Assignments In Jackson District

Jackson, Miss., one of Gulf Oil Corporation's seven main divisions, has been assigned W. W. Ramseur as district manager, M. C. Coleman as production manager, J. L. Herndon as exploration manager, and L. B. Wade as services manager.

The Jackson district covers parts of Arkansas, North Louisiana, Mississippi, Alabama, Georgia, Florida, North and South Carolina, and parts of Virginia, Maryland, Delaware and Southern New Jersey.

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INDUSTRY ITEMS . . .

Teasdel To Head Calco Board

Shaffer resigns as chairman of the board of Standard of Texas to become Calco president

Harold C. Teasdel, president of The California Company of New Orleans since 1947, will retire June 1 to become chairman of the board. Replacing him as president will be Kenneth H. Shaffer, who resigned his post as chairman of the board of Standard of Texas to accept the new position.

As one of the most active participants in the offshore industry for a number of years, Teasdel has been a particular advocate of safety programs for offshore personnel. He has been with Calco since 1941, first as director, secretary and treasurer, later as vice president and president. In addition, he has been a director of the Hibernia National Bank of New Orleans, a past president of the Petroleum Club, a trustee of the Public Affairs Research Council and a director of the Louisianan-Arkansas division of the Mid-Continent Oil and Gas Association.

He was born in Salt Lake City and took his B.A. degree in journalism at the University of Utah. After one year of newspaper work, he entered the Harvard Graduate School of Business Administration. When the United States entered World War I he transferred to Annapolis. After completing his training there he served as supply officer aboard a Navy overseas transport.

In 1920 he joined Standard Oil Company of California on the comptroller's staff. Advancing steadily through the ranks, he became director, secretary and treasurer of The California Company and three other affiliated pipeline and producing companies. He was named vice president in 1944, administrative assistant to

New officers for LAGCOE will head up the 1961 Louisiana Gulf Coast Oil Exposition in Lafayette. Elected at a recent meeting of the exposition operators were (left to right): new general chairman, Leo Franques, Louisiana division manager of Servco Company; co-chairman, W. A. (Stud) Grapes, Louisiana division manager of Falcon Seaboard Drilling Company; and treasurer, George Arceneaux, vice president of the Guaranty Bank & Trust Company, all of Lafayette. The next exposition is scheduled for October 19-22, 1961.

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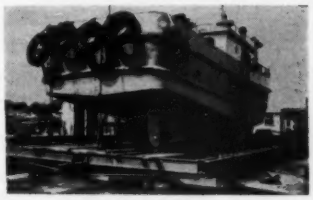

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the president in 1946, and president in 1947.

Kenneth H. Shaffer, a native of California, is a graduate of the University of California. In 1929 he joined Standard Oil Company of California as a civil engineer, rapidly moving up in engineering, producing, personnel, organization and industrial relations. He was appointed vice president of The California Company in 1952, and three years later moved to the presidency of Standard Oil Company of Texas. He was elected chairman of the board at the beginning of this year, a position he resigned in April to take over as Calco president.

Gulf Announces Changes For Houston District

H. F. Beardmore, former vice president of Warren Petroleum, will head the Houston district of Gulf Oil Corporation's production department. Under him are T. R. Deen, exploration; E. W. Showen, production; and M. B. Mosely, services.

The Houston headquarters is responsible for all exploration, drilling and production in Southwest Texas, East Texas and the Texas Gulf Coast.

Under Deen are J. D. Nunnally, district exploration geologist, and R. H. Davis, district landman. Manager of the Corpus Christi area is Don Irwin.

Working under Showen in production are J. A. High, district production geologist, and S. H. Miller, district engineer.

Area production managers named are: C. J. Rodgers, Beaumont; F. J. Mikeska, Kilgore; W. H. LeGrand, Pierce Junction; and Kinman Thompson, Victoria.

Stimson To Superintend Gulf Operations For Ada

Homer J. Stimson, formerly petroleum engineer for Ada Oil Company, has been named production superintendent in charge of the company's Gulf Coast operation.

Chet Whaley Joins Columbia Drilling

C. F. "Chet" Whaley became vice president of Columbia Drilling Company of Houston on the first of May according to an announcement by J. U. Teague, president.

Both Whaley and Teague are past presidents of the American Association of Oilwell Drilling Contractors.

Whaley was formerly president of Chet Whaley Well Servicing Company, Inc. of Houston.

George Engine Company delivers . . .

Another High-Speed Aluminum Crew Boat

Built by Sewart, 50-ft. "Roselyn" is powered by GM series 71 V-8 engines that drive her at speeds "well over" 30 mph

The new 50-ft. all-aluminum crew boat **Roselyn,** recently launched by Sewart Seacraft, Inc. of Berwick, La. for George Engine Company of Harvey, La., has been delivered to the new owner, P. U. Melancon of Morgan City.

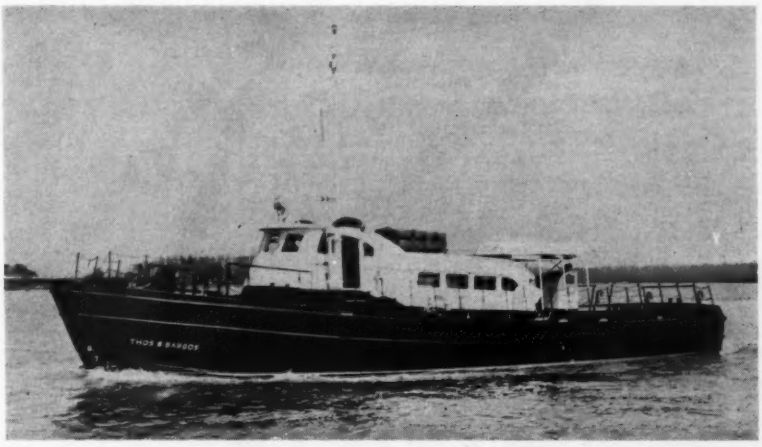
The **Roselyn,** capable of speeds "well over" 30 mph, is powered by a pair of symmetrically matched General Motors Series 71 V-8 diesels supplied by George Engine as part of the company's regular package deal whereby the distributor, working with the purchaser, assumes complete responsibility for supervising the design and construction of vessels, and also handles the financing if desired.

The **Roselyn** is identical in lines and power plant to another Sewart-built all-aluminum crew boat, the **Semarca 27** (*see Offshore, Dec.,* 1959), that made a sensational speed record of 36.92 mph before it was delivered for service in Venezuela.

The new vessel will operate in Louisiana Gulf Coast waters, according to the owner, who has several other crew boats operating offshore.

H. F. Colby, executive vice president and general manager of George Engine Company, says the **Roselyn** has such tremendous acceleration that passengers should be warned to sit down or hold on before the operator opens her up. Despite her high speed, he said, the Sewart-built craft is remarkably seaworthy and clean, throwing no spray even in moderately rough water offshore, where tests were made.

The vessel is certified by the U.S. Coast Guard for carrying passengers and supplies to drilling sites off the Louisiana coast. She carries a Raytheon radar and is equipped with bus-type seats, a small table for eating or playing cards, and a galley with electric range and refrigeration.



THOS. B. BARDOS, 80-ft. all-steel crew boat powered by twin GM 6-110 diesels, was purchased recently by Marine Service Company of Houston. Built by Sewart Seacraft of Berwick, La., the vessel has 20-ft. of open deck space aft of the house, and is U. S. Coast Guard-approved to carry 30 men. Now operating for a major oil company off the coast of Louisiana, it is one of a fleet of six offshore vessels owned by Marine Service Company and engaged in general marine oilfield service.

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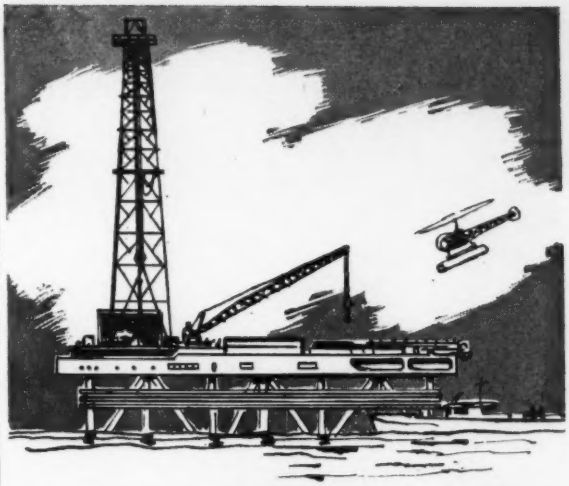
Mobile Units, Tenders, And Self-Contained Platforms

Mobile Units

OWNER	NAME	WATER DEPTH	PRESENT STATUS
Barge Facilities, Inc. Twin-hull submersible 217' x 100'	"Lloyd Noble S-66"	100'	Being built at Avondale Marine Ways
Barnwell Offshore, Inc. Self-elevating 176' x 176' x 152' with three 175' legs	"Mister Cap"	to 125'	Drilling for Continental Oil Co., Block 119, Vermilion Area
Barnwell Offshore, Inc.	Rig No. 2		Workover for Sinclair Oil & Gas, Timbalier Bay
Blue Water Drilling Corp. Submersible	Rig No. 1	70'	Drilling for Shell Oil Co. Block 76, South Timbalier Area
The California Company Submersible 11' x 90' x 156' with four 3' x 10' x 35' pontoons	S-45	18'	Bay Marchand, Louisiana
The California Company Submersible 12' x 90' x 190', with four 4' x 24' x 50' pontoons	S-55	45'	Bay Marchand, Louisiana, Noble Drilling Co.
Continental Marine Exploration Co. Submersible 230' x 99' with 54' between fixed hulls	"M & H Drilling Platform No. 12"	to 30'	Drilling for Cabot Carbon Co., Block 26, West Cameron Area
Coral Drilling Company Submersible 180' x 151' x 84' with four pontoons	"Mr. Arthur"	to 70'	Drilling for California Co., Block 2, Bay Marchand
Deepwater Exploration Co. Self-elevating overall 121' x 118'	"Deepwater No. 2"		Completely salvaged unit at LeTourneau, Vicksburg yard
Delta Marine Drilling Co. Submersible	"Chris Zeppa"	to 35'	Drilling for Tennessee Gas Co., Block 16, Well No. 3, East Cameron Area
Dixilyn Drilling Corp. Self-elevating 194' x 152' overall. Three 175' legs	"Julie Ann"	to 105'	Drilling for Sinclair Oil & Gas Co., Block 190, Eugene Island Area
Global Marine Exploration Co. Floating vessel	Cuss I	600'	Drilling for Texaco, Monterey and Newmont
Global Marine Exploration Co. Floating vessel	SM-1	600'	Idle
Global Marine Exploration Co. Floating vessel	Submarex	600'	Idle—Lake Michigan
Gulf Marine Drilling, Inc. Submersible	Rig No. 1	35'	Drilling for Gulf Oil Corp., Block 24, West Delta, Well No. 1
Hyperion Constructors Self-elevating	"George F. Ferris"	200'	Los Angeles, Calif., Stacked
Kerr-McGee Oil Ind., Inc. Submersible 13' x 54' x 160' with two 13' x 14' x 110' pontoons	Rig 40	to 22'	Drilling for Self, et al, Block 28, Ship Shoal Area
Kerr-McGee Oil Ind., Inc. Submersible 13½' x 72' x 140' with two 13½' x 13½' x 140' pontoons	Rig 44	to 40'	Waiting on location



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OWNER	NAME	WATER DEPTH	PRESENT STATUS
Kerr-McGee Oil Ind., Inc. Submersible 142' x 69' x 13'6", with two 10' x 11' x 146' pontoons	Rig 45	to 35'	Drilling for Tennessee Gas & Oil Co., Block 47, Vermilion Area
Kerr-McGee Oil Ind., Inc. Submersible	Rig 46	to 70'	Drilling for Superior Oil Co., Block 70, West Cameron Area
Kerr-McGee Oil Ind., Inc. Submersible	Rig 47	to 70'	Drilling for Self, et al, Block 125, East Cameron Area
Long Point Gas & Oil Ltd.	Translake No. 1	35'	Drilling for Self, Lake Erie
Long Point Gas & Oil Ltd.	Translake No. 2	40'	Drilling for Self, Lake Erie
Louisiana-Delta Offshore Corp. Submersible 180' x 151' x 12'	Drill Barge Louisiana	to 65'	Drilling for Shell Oil Co., East Bay
Louisiana-Delta Offshore Corp. Submersible 156' x 90'	Drill Barge Delta	to 25'	Drilling for Humble Oil & Refining Co., Block 66, Ship Shoal Area
Magnolia Petroleum Co.	Rig 52	24'	Drilling for self, Main Pass Area
Midcon Oil & Gas Co., Ltd. Cable tool	Midcon No. 1	90'	Drilling for self, Lake Erie
Movible Offshore Co. Submersible 201' x 211' x 110'	"Movible No. 2"	to 80'	Drilling for Mobil Oil Co., Block 119, Eugene Island Area
Movible Offshore Co. Submersible 200' x 146' x 67'	"Movible No. 3"	to 45'	Drilling for Texaco, Block 216-S, Galveston Area
New York State Natural Gas Corp. Cable tool	Argonyn I		Erie Harbor for the winter
Ocean Drilling & Exploration Company Submersible 200' x 300' x 98'	"El Dorado"	to 70'	Drilling for Shell, Block 129, Eugene Island Area
Ocean Drilling & Exploration Company Submersible 132' x 220' x 58'	"Mr. Charlie"	48'	Drilling for Self, Block 19, South Pelto Area
Ocean Drilling & Exploration Company Submersible 120' x 180' x 49'	"John Hayward"	30'	Drilling for Self, Block 90, Eugene Island Area
Ocean Drilling & Exploration Company Submersible 200' x 300' x 93'	"Margaret"	to 60'	Drilling for Shell Oil Co., Block 27, South Pass Area
Ocean Drilling & Exploration Company Submersible 120' x 180' x 50'	"St. Louis"	30'	Drilling for British American, Block 19, West Cameron Area
The Offshore Company Self-elevating 131½' x 117' x 220' with fourteen 6' dia. caissons	Mobile Unit No. 52	100'	Drilling for Gulf Oil Corp., Key West, Fla.

OWNER	NAME	WATER DEPTH	PRESENT STATUS
The Offshore Company Submersible 12' x 74' x 200' with four 6' dia. caissons	Mobile Unit No. 53	35'	Drilling for Union Oil of Calif., Block 26, Vermilion Area
The Offshore Company Self-elevating 200' x 104' x 15' with eight 12' dia. towers	Mobile Unit No. 54	100'	Drilling for California Co., Block 87, S. Timbalier Area
The Offshore Company Self-elevating 200' x 104' x 15' with eight 12' dia. towers	Mobile Unit No. 55	100'	Trinidad, Gulf of Paria
Cia Barca de Panama Self-elevating 200' x 104' with 8-12' dia. towers	'Delong No. 144	126'	Drilling for Pan American International in Persian Gulf
Penrod Drilling Company Submersible 196' x 108'	Rig 50	44'	Drilling for Hunt Oil Co., Eugene Island Area
Penrod Drilling Company Submersible 150' x 190'	Rig 51	to 60'	Drilling for Calco, Bay Marchand Area
Penrod Drilling Company Submersible 198' x 174'	Rig 52	100'	Drilling for Placid Oil Co., Eugene Island Area
Place Gas & Oil Co., Ltd.	Mr. Cliff	42'	Drilling for self, Lake Erie
Place Gas & Oil Co., Ltd.	Barge 1		Drilling for Self, Lake Erie
Place Gas & Oil Co., Ltd.	Barge 2		Drilling for Self, Lake Erie
Place Gas & Oil Co., Ltd.	"Mr. Pat"		Drilling for Self, Lake Erie
Reading & Bates Offshore Drilling Company Self-elevating	"C. E. Thornton"	to 110'	Drilling for Japanese Arabian Oil Co. in Persian Gulf
Reading & Bates Exploration Company Self-elevating	"Mr. Louie"	to 85'	Drilling for Phillips Petroleum Co., Block 161, East Cameron Area
Rimrock Tidelands, Inc. Submersible	"Rimtide"	35'	Drilling for Gulf Oil Corp., State Lease 3529, Well No. 1, West Delta Block 27 Field.
Sea Drilling Corp. Submersible	"Seadrill 2"	30'	Block 17, East Cameron Area
Sea Drilling Corp.	"Seadrill 3"	30'	Block 26, West Delta Area
The Shell Co. of Qatar, Ltd.	Seashell	100'	Drilling for Shell off Qatar
Southeastern Drilling Corp. Submersible 11' x 90' x 156' with four pontoons	Rig 22, Barge 8		Drilling for California Co., Block 107, Ship Shoal Area
Standard Oil Co. of Calif.	Western Explorer	200'	California, stacked
Tidelands Drilling Co. Self-elevating Deck 258' x 104', pad 200' x 180' with four 10' dia. columns	"Mr. Gus II"	150'	Drilling for CATC, Block 199, Ship Shoal Area
Union Producing Co. Submersible 160' x 190'	Barge A	to 76'	On location in Block 53, Eugene Island Area
Universal Drilling Company Self-elevating	"Mr. Louie"	to 130'	Drilling for Phillips Petroleum Co., Block 161, East Cameron Area
Zapata Off-Shore Company Self-elevating. 194' x 152' overall. Three 145' legs	"Vinegaroon"	to 105'	Drilling off Mexico
Zapata Off-Shore Company Self-elevating. 20' x 80' x 140', with three 152' triangular legs	"Scorpion"	80'	Drilling off Mexico

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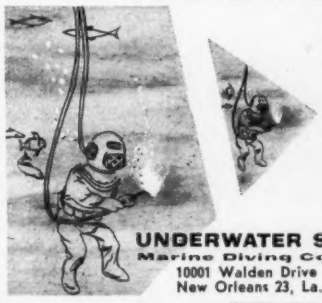

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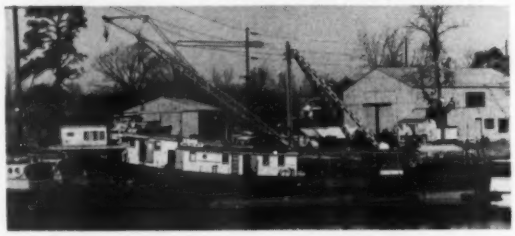

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OWNER	NAME	WATER DEPTH	PRESENT STATUS
Zapata Off-Shore Co. Floating drill barge	"Nola 1"		Drilling in the Gulf of Paria
Zapata Off-Shore Co. Floating drill barge	"Nola 2"		Salvaging
Zapata Off-Shore Co. Floating drill barge	"Nola 3"		Drilling off Trinidad

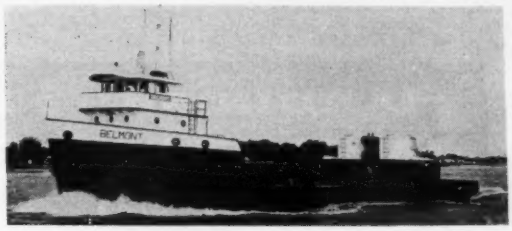
Drilling Tenders

An-Son Offshore Drilling Co.	"Carl B. Anderson"		Leased to the Offshore Co.
The California Company Converted LST, 328' x 50'	S-21	25'	Bay Marchand, Louisiana, Calco
The California Company Converted LST, 328' x 50'	S-22	49'	Bay Marchand, Louisiana, Calco
The California Company Converted LST, 328' x 50'	S-23		Mothballed
The California Company LST, 328' x 50'	S-24	46'	Bay Marchand, Louisiana, Calco
The California Company LST, 328' x 50'	S-25	48'	Bay Marchand, Louisiana, Calco
The California Company LST, 328' x 50'	S-26	40'	West Delta, Louisiana, Noble Drilling Co.
CATC Group New tender, 260' x 54'	"J. C. Craig"		Drydock
CATC Group New tender, 260' x 54'	"Carle Sharp"	101'	Ship Shoal, Block 198
CATC Group New tender, 260' x 54'	"Ernie Miller"	88'	Grand Isle, Block 47
CATC Group New tender, 260' x 54'	"Jack Cleverley"		Ship Shoal, Block 198
Deepwater Exploration Co. Converted LST, 328' x 50'	"Deepwater No. 1"		Preparing to go to Block 54, Vermilion Bay, for Humble
Delta Marine Drilling Co. Converted LST, 326' x 50'	"Joseph Zeppa"		West Delta, Louisiana, Humble Oil & Refining Co.
Gulf Oil Corporation New tender	"Dolphin"		Completely placed in moth ball fleet at Orange, Tex., engines pickled, and rig stacked
Gulf Oil Corporation Converted LST, 328' x 50'	"Eagle"		Rig stacked at Morgan City, Louisiana
Gulf Oil Corporation New tender, 272' x 60'	"Pelican"		Block 132, S. Timbalier area, self
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-1		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-2		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-3		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-4		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-5		At Orange, Texas for storage
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-6		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-7		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-8		Standing by

OWNER	NAME	WATER DEPTH	PRESENT STATUS
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-9		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-10		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-11		Standing by
Humble Oil & Refining Co. Converted LST, 328' x 50'	ST-12		"O" Platform in West Delta, Block 30 field
Kerr-McGee Oil Ind. Inc. New Tender, 250' x 50'	"Kermac II" Rig 43		Idle
Kerr-McGee Oil Ind. Inc. New Tender, 250' x 50'	"Kermac III" Rig 48		Waiting on location
Kerr-McGee Oil Ind., Inc. Converted YF, 260' x 48'	"Frank Phillips" Rig 39		Idle
Magnolia Petroleum Co. Converted YF	"Gulf Coast Barge No. 2"		Out of Service
MCN Group Converted YF	MDT-1		Drilling in Block 128, Eugene Island Area, Well D-3, for self
MCN Group Converted YF	MDT-2		Out of Service
MCN Group Converted YF	MDT-3		Out of Service
MCN Group Converted YF	MDT-4		Out of Service
MCN Group Converted YF	MDT-7		Out of Service
Pan American International Oil Company	Panintoil 1		Being prepared for drilling in Persian Gulf for self
Reading & Bates Offshore Drilling Company	"J. W. Bates"		Drilling in Persian Gulf for Japanese Arabian Oil Co.
Reading & Bates Offshore Drilling Company	"George M. Reading"		Drilling for Standard Oil Co. of Texas, Block 52, Galveston Area
Reading & Bates Offshore Drilling Company	"G. L. Temple"		Drilling for Tennessee Oil & Gas, Block 215, Eugene Island Area
Reading & Bates Exploration Company	"Clayton G. Dorn"	110'	Drilling for Tennessee Gas & Oil Co., Block 215, Eugene Island Area
Southeastern Drilling Corp. Converted YF	Rig 12 Barge 9		Enroute to Persian Gulf to work for the Arabian Oil Co., Ltd.

Self-Contained Platforms

COMPANY	DESCRIPTION	YEAR BUILT	LOCATION	WATER DEPTH
CATC Group	52' x 110'	1956	Block 45, West Delta	50'
Freeport Sulphur Co.			Block 9, Grand Isle, Self	45'
Gulf Marine Drilling, Inc. Rig #2			Bayou Boeuf, awaiting location	
Gulf Oil Corporation	40' x 100'	1957	Rig Stacked at Morgan City, La.	
Humble Oil & Refg. Co. Rig #50	78' x 200'	1956	Block 16 Field, "L" Platform, Grand Isle Area	50'
Humble Oil & Refg. Co. Rig #54		1958	"O" Platform, West Delta Block 30 field	
Humble Oil & Refg. Co. Rig #55			"P" Platform, Grand Isle Block 16 field	
J. Ray McDermott			Block 68, West Cameron Area, The Offshore Co.	
Phillips Petroleum Co.	88'9" x 140'	1957	Block 129-A, Eugene Island Area, platform inactive	52'
Phillips Petroleum Co.	88'9" x 140'	1956	Block 191, Eugene Island Area, platform inactive	81'
Phillips Petroleum Co.	204' x 133'	1960	Block 161, East Cameron Area	
Pure Oil Company Converted LST	328' x 50'	1958	Orange, Texas	
Pure Oil Company	52' x 106 with 51' x 82' pipe rack	1957	Block 126, E. Cameron Area	72'
Shell Oil Company	55' x 110'	1958	Block 176, Eugene Island Area, Platform inactive	86'
The Superior Oil Co.	96' x 225'		Block 168, West Cameron Area	



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The illustration to the left shows one of the popular full revolving type stationary cranes, specially designed for offshore rigs, which can be conveniently obtained at Southern Equipment & Tractor Co., Inc. . . . The one shown is a Lima 34 Paymaster. Here you can also see models by Insley and Schield-Bantam, along with air compressors, air tools, water pumps and small generator units. . . . Our large well-equipped offices at Baton Rouge and New Orleans give special attention to the needs of offshore operation, while the offices at Monroe and Shreveport feature other lines useful to the oil industry. It would be a pleasure to show you our equipment line-up at any time. Come see us, or call us for prices and full information.

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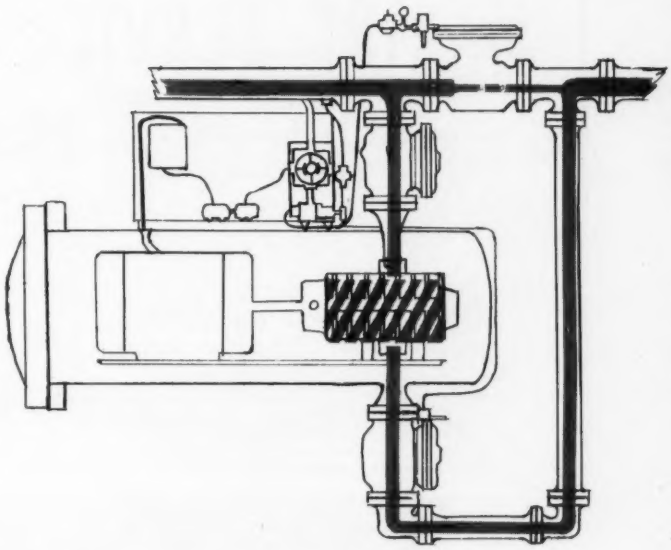
Electric System Gets Power From Gas Flow

Powered from the flow of gas in the line, a new constant-voltage generating system has been developed especially for use offshore and in remote locations to provide power for navigational lights, microwave and remote control units. According to the designers, Odex Engineering Company of Houston, this is the first gas-flow operated system to provide constant and ample voltage regardless of the flow of gas through the lines.

Earlier systems, so Odex engineers say, have failed to deliver a constant current, so that the voltage rose and fell with surges in the gas flow. This surge, they claim, has been eliminated in the new unit that fits directly into the flow of a natural gas pipeline. The unit delivers 115 VAC with a 5-volt variance at 60 CPS $\pm$ 2 CPS even with variations in line pressure and flow rate over a very wide range.

The system employs a low pressure blower driving a brushless type AC generator, both enclosed in a pressure vessel. The blower motor is driven from gas pressure in the pipeline, and the intake and exhaust ports to the enclosed blower are controlled by a throttle valve which is in turn controlled or positioned by an electric-to-air converter controller. The converter input signal is derived from a tachometer generator driven by a synchronous motor. The synchronous motor speed is controlled by the output frequency of the AC generator, and the generator speed is controlled by the gas operated blower speed. Result is a closed loop control system which is self regulatory.

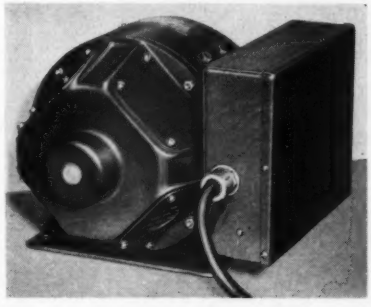


By employment of the pressure chamber, no rotary seals, commutator rings or slip rings are used, and the unit is explosion proof. The pressure differential across the blower is from 10 to 20 lbs. The unit was particularly designed to take advantage of low pressure blowers now on the market.

Electric motors

New AC-DC Line For Mobile Field Equipment

A new line of integral hp AC-DC electric motors suited for use with mobile field equipment in remote places now comes in ranges up to 7½ hp @ 1800 to 1200 rpm speeds. Previous AC-DC applications, say the manufacturers, have been only in fractional hp with operating speeds of 5,000 rpm. The design includes open ventilated motors with four silicon rectifiers in a bridge circuit that does not require reconnecting for each type of circuit. Quick blow-



out fuses protect the motors and, by using series or compound wound fields, inductance in series with the armature is avoided. For more information write **Robbins & Myers, Inc., Springfield, Ohio.**

Joint sleeve

Protects Against Blasts In Multi-Completion Wells

A lightweight, high-temperature resistant, high-impact plastic permanent blast-protective sleeving for steel tubing strings in multiple completions for use in areas subject to blast from casing perforation will withstand temperatures to 285° F. and pressures up to 12,000 psi. The new protective coating is applied to the exterior of steel tubing through a special process and is guaranteed against shifting, sliding, buckling or bellying under pressure. Ac-

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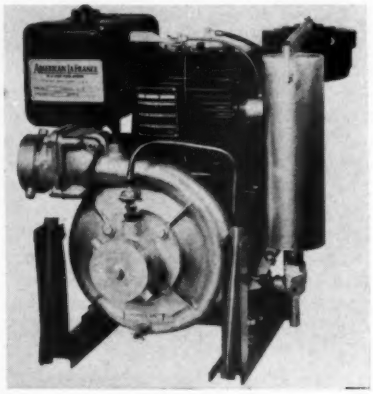
cording to the manufacturers, the blast joint protector increases tubing string life expectancy as much as 8 times in deep holes with blast problems. A ½-inch coating has proved 10 to 20 times greater resistance to sand and grit abrasion. It is unaffected by normal acids and alkalies generally found in wells. For more information write **Grigsby Brothers, Inc., P. O. Box 482, Lafayette, La.**



Fire pump

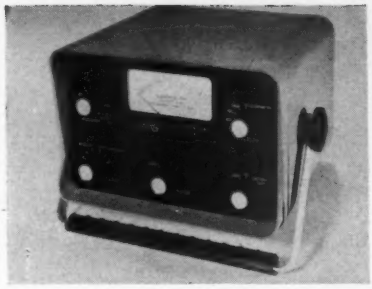
Two Men Can Easily Carry This Lightweight Unit

A portable fire pump that two men can carry easily has an all-aluminum casing set on a channel steel frame, with folding handles. It can be carried in a light truck and moved readily into an emergency area. The impeller is on the shaft extension with no pump bearings to service or replace, and the shaft is fitted with a mechanical water seal requiring no adjustment. The pump is powered by a 9-hp Briggs & Stratton engine and the pump is rated at 250 gpm at 15 psi. Suction and discharge are both 2½-inch. For more information write **American LaFrance, Elmira, N.Y.**

Vibration meter

Portability, Range Accuracy, Selectivity Are Featured

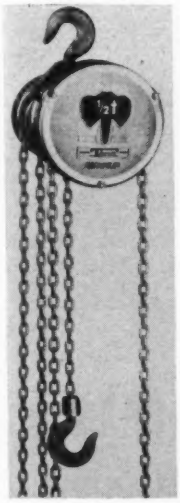
A compact, portable vibration meter with the accuracy of laboratory models has been developed for field use. Built-in networks integrate and differentiate the input signals giving direct readings of velocity displacement amplitude and acceleration components of vibration and, from a simple computation, its frequency. The meter can accept inputs from piezoelectric transducers as well as



from the seismic type. Up to 6 simultaneous transducer outputs, 3 for velocity, 3 for crystal accelerometers, can be used. It gives readings up to 1000 g acceleration, 0.01 to 100 inches per second velocity and 0.001 to 10 inches displacement at better than 5 per cent accuracy. For more information write **Southwestern Industrial Electronics, Inc., 10201 Westheimer Road, Houston 27, Texas.**

Hand hoist

Sizes From ½-Ton To 10-Ton Capacity Offered



A compact lightweight, spur-geared hand hoist with working parts enclosed in an aluminum housing is now offered in eight sizes from ½-ton to 10-ton capacity. The sealed housing is designed to exclude dirt, dust and weather from working parts for longer life in outdoor use, and around dust-filled areas. The aluminum housing and special steel alloy in the gearing have reduced size and weight as much as 30 per cent. A new type of noiseless load brake makes for easier handling and eliminates rachets and other parts subject to high degree of wear, say the makers. Rounded chain entry prevents binding and forged steel alloy hooks for heavy duty are mounted in full swivel sockets. A light hand pull of 75 lbs. will raise a capacity load. Safety design cuts danger of caught fingers. For more information write **Thern Machine Company, 3760 Fourth St., Winona, Minn.**

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SERVICE PERSONALITIES . . . In The NEWS

Baash-Ross Transfers Waller To Houston Sales District

F. L. Waller has been transferred to Houston as district sales representative for the Baash-Ross Division of Joy Manufacturing Company.

Waller joined Baash-Ross in December, 1945. He was formerly operations manager of the company's Odessa plant.

Regan Joins Reagan Tool Company Sales Staff

Richard Regan has joined the sales staff of Reagan Tool Company of Morgan City, La., and will represent Reagan as sales engineer in New Orleans and its surrounding area.

For the past four years, Regan has been affiliated with the Oil Tool Department of Avondale Marine Ways as a sales engineer. Previously, he was with Regan Forge and Engineering Company of California—a family firm. The Regan family has achieved an enviable reputation manufacturing and selling blowout preventer equipment, crown and traveling blocks, and other related products, and Richard Regan served the family firm for 20 years as sales and service manager.

Since moving to Louisiana, Regan has served as project supervisor on a number of rig-up jobs for inland drilling barges.

Regan

Lyons

Magcobar Appoints Lyons V-P Of Customer Relations

John E. Lyons, formerly sales manager of the drilling mud department, Magnet Cove Barium Corporation (Magcobar), has been appointed vice president of customer relations.

Since returning from service with the U. S. Air Force in 1954, Lyons has held key drilling mud sales positions with the Houston-based firm, including special sales representative, sales coordinator, assistant sales manager and sales manager. He first joined Magcobar in January, 1946, and was re-called by the air force for the Berlin air-lift in 1948.

Polk Appointed Executive Vice President For Dowell

A. C. Polk has been appointed executive vice president and general manager of Dowell Division of The Dow Chemical Company, it has been announced by Dr. A. P. Beutel, president. Polk has been Dowell vice president and general manager. He succeeds John G. Staudt in the position of executive vice president and retains responsibility of general manager.

Staudt, who has been with Dowell since 1932, moved to Cleveland, Ohio, April 18, as president of Dobeckmun Company Division of The Dow Chemical Company. He has been executive vice president and director of Dowell since 1948. He is also president and director of Dowell of Canada, Ltd., president and committee member of Dowell Division of Dow Quimica Argentina S. A., president and committee member of

(*Continued on next page*)

Changes In Halliburton Domestic Field Staff

Four changes in Halliburton Oil Well Cementing Company's domestic field organization have been announced by Harry P. Conroy, vice president in charge of field operations.

D. J. Sargent has been named assistant division manager for Halliburton's New Orleans division. Sargent was employed by Halliburton in 1937, and has since worked as driver, operator, fieldman, district superintendent, division credit manager, division training supervisor and regional training supervisor, his most recent assignment.

R. W. Graham is the new division engineer for Halliburton's Denver division. Following graduation from Texas A.&M. College in 1949 with a degree in petroleum engineering, he joined Halliburton and has since worked in the company's Shreveport division as driver, echometer operator, field engineer and district engineer. In 1954 he transferred to Fort Worth as a sales engineer and in July, 1959, to Denver as assistant division engineer.

Sargent

Graham

John Banister, who has been division engineer at Denver, has been promoted to assistant division manager for Halliburton's Lubbock division. Banister graduated from Texas A.&M. College with a chemical engineering degree in 1948, was employed by Halliburton the same year, and has since had engineering assignments in West Texas and Rocky Mountain areas. He was named division engineer at Denver in 1952.

Bannister

Muse

Leroy Muse has been named testing and tools superintendent for Halliburton's Oklahoma City division, which includes the state of Oklahoma. Formerly he was assistant division manager at Lubbock.

Muse joined Halliburton in 1934 at Odessa and has since been driver, cementer, fieldman and district superintendent in the West Texas and Four Corners area. He had been assistant division manager at Lubbock since 1952.

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Dowell Division of Dow International Limited S. A., and president and board member of Dow Industrial Service Division.

A native of Houston, Texas, Polk joined Dowell in 1941 as a service engineer. He was district manager for Dowell at Houston for four years. He moved to the Tulsa general offices of the company in 1948 as assistant manager. In 1950 he was elected a director and in 1951 appointed general manager. In 1952 he became vice president.

Polk

Humphrey

Humphrey To Direct Marine, Industrial Engine Sales

Appointment of William F. Humphrey as director of sales, marine and industrial engine division, has been announced by Chrysler Corporation.

Humphrey, formerly director of sales for Hercules Motor Corporation, succeeds L. E. Nelson who is re-joining the automotive sales group, Chrysler Corporation.

Division Personnel Changes Announced By Tube-Kote

Two major personnel changes for the Louisiana division of Tube-Kote, Incorporated have been announced.

Henry C. King has been named manager of the Harvey, La. plant and Fred F. Gafford has been named area representative.

King was the former sales representative for the area. Gafford was formerly vice president and treasurer of Bagwell General Steel Company.

Baroid Division Appoints District Superintendent

Baroid Division National Lead Company has announced the appointment of B. R. Fry as superintendent of the district covering Mississippi, Alabama, North Carolina, South Carolina, Georgia and Florida, with headquarters in Jackson, Miss.

Fry attended the University of Oklahoma where he majored in geology. He joined Baroid in 1948 and was made a drilling mud service engineer in 1952. Since 1956 he has worked in Liberal, Kansas as district superintendent, and as a sales representative in Tulsa, Okla.

Baroid also announced the appointment of Rex Haile as sales representative in the company's East Louisiana area, with headquarters in New Orleans. Haile recently returned from a foreign assignment.

Oden, Foster Promoted By The McEvoy Company

The McEvoy Company has announced the promotion of A. C. Oden to the position of Eastern regional sales manager and manager of export sales.

Oden is a past officer of the Houston Chapter of Nomads, and a member of the API, Houston Chapter.

James H. Foster has been named manager of the Western region for the McEvoy Company. Foster will be responsible for McEvoy's operations in the oil-active areas of Texas, the Midwest and the Rocky Mountain region.

Foster is a graduate of the Texas A.&M. School of Mechanical Engineering and is an active member in the AIME.

Wilson Supply Appoints Regional Sales Manager

Paul Hensen has been appointed regional sales manager for the International Division of Wilson Supply Company, it was announced by W. S. Wilson, company executive.

Hansen came to Wilson Supply International from ITEC S.R.L., Buenos Aires, where he was sales manager of the company's oilfield supply operations. Prior to his oilfield sales experience in South America, Paul Hensen spent five years in North Africa working for a Swedish drilling company.

Delta Tank Appoints Houston Branch Manager

George W. Henderson has been appointed Houston branch manager of the oilfield equipment division of Delta Tank Manufacturing Company, Inc. He will head the newly

established sales and service branch, part of Delta's direct sales expansion program. Henderson has served in both sales and managerial capacities with some of the nation's leading producers of petroleum equipment in the Houston area for the past seven years.

Halliburton Names Grant Regional Training Supervisor

Harold Grant has been named regional training supervisor for Halliburton Oil Well Cementing Company's southern region—its Corpus Christi, Houston, New Orleans and Shreveport divisions.

Before joining Halliburton in 1940, Grant studied at Oklahoma State University and had worked as a driller and tooldresser. Since then he has been stationed in the Gulf Coast, Central and West Texas areas as driver, cementer, fieldman, district superintendent and division training supervisor. His most recent assignment has been as district superintendent for Halliburton's Houston field locations.

Grant replaces D. J. Sargent as regional training supervisor. Sargent is now assistant division manager for the company's New Orleans division.

Grant

Flemmons

Cardwell Names Assistant To General Manager Of Sales

Jim Flemmons has been promoted to the position of assistant to the general manager of sales, it has been announced by J. T. Tucker, general manager of sales, Cardwell Manufacturing Company, Inc.

Prior to joining Cardwell, Flemmons was a member of the sales division of Republic Steel, and more recently was district sales representative for Cardwell in the Oklahoma-Texas Panhandle area. He has had extensive experience in the oilfields throughout Texas, Oklahoma and Louisiana. Flemmons will headquarter at the Cardwell main plant in Wichita, Kansas.

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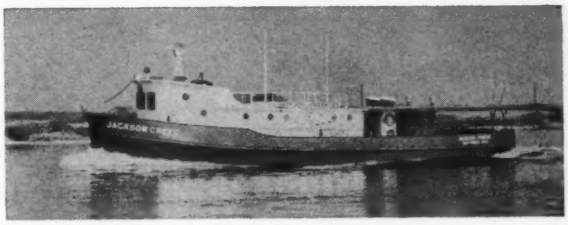

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The Slush Pit . . .

The Texas oilman went into a plush New York art gallery before Christmas and ordered, "Give me a dozen of those Van Goghs, a dozen of those Picassos, ten of those Monets and a half dozen of those Rembrants.

Turning to his wife he said, "Now then, honey, we have our Christmas cards. Let's get on with our shopping."

There was once a castaway on a small desert island. One day a barrel floated ashore, with a beautiful girl clinging to it. The castaway rushed to help her through the surf.

"How long have you been shipwrecked here?" she asked, when she caught her breath.

"Fifteen years," he replied.

"You poor man!" she exclaimed. "But now you'll have something you haven't had in fifteen years."

The castaway looked delighted. "You mean there's beer in that barrel?" he demanded.

A ragged panhandler accosted a well-dressed oilman and asked for a handout. The oilman said, "I'll do better than that. I'll buy you a drink."

"No, thanks," answered the bum. "I never drink."

"Well, have a good cigar then," offered the oilman.

"No, thanks, I don't smoke either," replied the beggar.

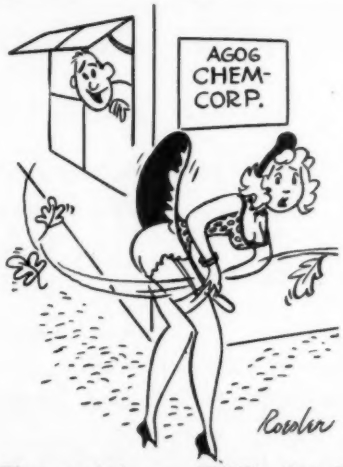
"I'll tell you what I'll do," said the oilman. "I've got a tip on a horse that will not only bring you in some money, it might give you enough to buy a suit."

"I couldn't do that!" cried the panhandler. "I never gamble. All I want is food."

"You'll have it," vowed the oilman, "and right at home with me. I want my wife to see what happens to a guy who doesn't smoke, drink or gamble."

The Oklahoma pusher said to the well-stacked Indian girl, "I've got fifty dollars that says I can take you out and show you the best time you've ever had."

"And I've got a buck that says you can't," retorted the W.S. Indian girl.



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